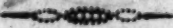


MURAL NIGHTS.



VOL. I.





ELEMENTS

OF

CIVIL KNOWLEDGE.

BY

HENRY REDHEAD YORKE, Esq.

I am here inquiring into the conduct of the understanding in its progress towards knowledge; and to those who aim at that, I may say, that he who fair and softly goes steadily forward in a course that points right, will sooner be at his journey's end, than he that runs after every one he meets, though he gallop all day full speed.

Locke's Conduct of the Understanding. § 20.

PRINTED FOR THE AUTHOR
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1800.



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ALTHOUGH the Author can now shew a long list of respectable booksellers who are ready to sell the MURAL NIGHTS, yet, he thinks himself justified in not committing the present volume into their hands, until the original Subscribers are supplied, and the great expences of the publication which have been entirely at his own cost, have been in some measure defrayed. There are besides many copies ordered to be sent across the Atlantic, so that the Author's friends are requested until further notice, to send for the present volume, either from the Printer, or from the Author's Chambers, No. 1. Pump Court, Temple, London.

Should the Author's expectations not be disappointed in the reception of the present volume, it is his intention to put the second to the Press with all speed, in the hope that a subject to which he has devoted many years of study, and which is so interesting at this time, may prove acceptable to the Public. It was his intention to have published the second volume before the present, had it not been for the exceptions taken four years ago to the idea of a Political Work of his composition.

The reader is requested to make every reasonable allowance for the occasional impossibility of the Author's correcting the sheets, and for the disadvantages of a country Press, although he believes there are but few faults, and not one that in any degree alters the sense.

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PREFACE.

THE following treatise was written so long ago as the year 1796, and a thousand impressions of the first 152 pages were printed off in the ensuing year, but never published. It is a singular fact that in the year 1797, no bookseller could be found in the metropolis, who felt disposed to affix his name to any publications of mine. The work which I had prepared for the Press, and which apparently alarmed the booksellers, was entitled "Britannicus," containing for the most part, notes and comments on various portions of our history, to which was added a second volume of Essays on various subjects.

When it was evident that the difficulties could not be easily surmounted, the propriety of publishing such of my manuscripts as were not of a political nature was suggested. Accordingly, from some hints which I had written on the subject during my confinement in York Castle in the years 1794 and 1795, the matter has since swelled into a volume. My ori-

ginal design, as the reader will perceive from the beginning of the work to page 155 inclusive, was much more extensive. I intended to have given an historical narrative of the education of a young person from infancy to manhood; in which would be comprized an analysis of every separate study as it arose under consideration, and afterwards to have travelled with him into foreign countries. Under this idea, I should have inserted my own remarks on the condition of most of the states of Europe, at the different periods when I visited them. I flattered myself that three volumes might be finished while I was in seclusion from the world, and that a volume might be produced every year until the whole was completed. But as I advanced in the work, it became evident, that the plan was more laudable in theory, than susceptible of execution. For, besides my deficiency in various branches of useful knowledge, a work of such a nature would appear with infinitely greater advantages before the public, if it were the joint concern of several persons, and not the production of the labors and industry of a sin-

gle individual. Each person might then undertake to illustrate that science in which he was most skilled, and thus might be formed a comprehensive and useful Code of Public Instruction.

From these considerations, I paused at the instant, when the analysis of the education of Eugenius closed; so that the reader will perceive the extensiveness of the design from the perusal of the first three chapters of the present work. Eugenius is therefore forgotten in the remaining chapters, and the instruction of the middle Classes occupies the residue of the work, in which the arguments employed in the former part are occasionally adverted to as data.

Many books have been published on the subject of education, many vices have been justly ascribed to its defects; many schemes of a more perfect system have been suggested; but I have never met with any one which may be strictly said to combine practice with theory, and to accommodate itself fully to the occasions of the people. Most of their works, excellent in themselves, propose what should be *in future*. The

object of the present treatise, is not only to shew *what* is to be done *now*, but *how* it is to be done.

It must not however be concealed, that in this work "more is meant than meets the ear." Although it was written with a view to metho-
dize a plan of education, yet I had always in my mind's eye, that numerous portion of the community, whose education has been defective or neglected. This book is as well calculated for a man of forty, as for a boy of ten years of age, and makes no distinction between the Man of fortune who has neglected the culture of his mind, and the Tradesman.

Numberless complaints are often made by persons who are engaged in the pursuits of life, that they are in want of a method of occupying and improving their minds. By paying proper attention to the subjects treated of in this volume, and by referring to the authors who are mentioned under the various departments of science, they will find no difficulty in making a rapid progress in this sort of self-education. It is not the quantity but the quality of the authors whom we read, that must deter-

mine our certainty of improvement in genuine knowledge. The younger Pliny in B. 7. Lett. 9. says, "You will remember that the most approved writers of each sort are to be carefully chosen; for as it has been well observed, though we should read much, we should not read many books." Lord Shaftesbury in his Characteristics, V. 1. 142. says, "It is improper to call a man *well read*, who reads many authors, since he must of necessity have more ill models than good; and be more stuffed with bombast, ill fancy, and wry thought, that filled with solid sense and just imagination.

Sir W. Temple in his Essay on Learning observes, "that it lessens the force and growth of a man's genius, and doubts whether the weight and number of so many other men's thoughts and notions, may not suppress his own, or hinder the motion or agitation of them, from which all invention arises; as heaping on wood, or too many sticks, or too close together, suppresses, and sometimes quite extinguishes a little spark, that would otherwise have grown up to a noble flame".

than

It has been thought adviseable to postpone the publication of the catalogue of books referred to in page 267 until the publication of the second volume, which, with the present will embrace all those parts of knowledge that are called elementary.

The present work is not written for the learned; but exclusively for that large portion of the community, who have been too much neglected by learned writers. It is on this account that authorities have been less quoted, and the ostentation of reading many books avoided. Public utility has been my sole object; and if thinking men will have the courage to pursue such measures as have been recommended in this treatise, I will venture to prognosticate that a great advancement will be made in the cause of truth, virtue, and freedom.

Nor let it be supposed that in thus delivering my opinions, I wish to arrogate any particular merits to this offspring of solitude which I now offer to the world. I have said more than once that my only object is the public good; and therefore, if there be any work of better infor-

mation on the subject, let mine be laid upon the shelf. But until then, it may, however defective, merit some consideration. Whatever therefore, may be the fate of the plan, the circumstances under which it was digested, will always afford to me a pleasing subject of recollection. When immured in a prison, and debarred the society of all human beings, when neglected, forsaken, and forgotten, I was left to extricate myself by my own exertions from the dangers that threatened me, it surely is not an impertinent reflection that I possessed sufficient calmness and tranquillity of mind to direct my thoughts to such subjects, and to endeavor to render myself useful to that community which formerly flattered, and then deserted me. It is well known that in the hour of midnight and silence my lamp has

Been seen in the high lonely tow'r,

Where I have oft outwatch'd the bear

and projected, amidst other literary pursuits, the system of instruction for the YOUNG AND RISING GENERATION, which is now offered to the public.

Though scorched by the lightening of the state,
 I was not consumed by it; but on the contrary,
 have derived great profit from adversity. I
 have learnt this most useful and comfortable
 lesson, that to an upright mind, peace and
 contentment are qualities totally independent
 of external circumstances, and that they may
 be enjoyed, (as they certainly were by me) as
 well in solitude and captivity, as amidst "the
 busy hum of men," surrounded by falshood
 servility, and fraud, though gilded over by
 more courtly and fashionable names. To prove
 this, without presuming to draw the remo-
 test parallel, it should be remembered that
 Cervantes delighted, and Sir Walter Raleigh in-
 structed, the one by his admirable wit, the other
 by his profound history, every generation which
 has succeeded the ages in which they lived.

The bravely patient to no fortune yields,
 On rolling oceans, and in fighting fields,
 Storms have I past, and many a stern debate;
 And now in humbler scenes submit to fate.

3 JA60

Dorchester, July 30, 1800.

MURAL NIGHTS.


EUGENIUS,

OR,

ELEMENTS OF CIVIL KNOWLEDGE.

—•••—
CHAP. I.

On early Instruction.
—•—

IN the system of instruction which has been here adopted to form the character and assist the genius of a youth of respectable family and fortune, the reader will readily perceive that the common mode, has been in a great measure reversed. The first elements of knowledge which Eugenius received from the solicitude of a virtuous and affectionate parent, combined all those principles which are generally and fatally delayed until a more advanced and matured period of

youth. His education began where the education of others usually closes; but it was adapted to render him, amid all the vicissitudes of life, not only happy in himself, but to excite perpetually his active energies, in promoting the happiness of his fellow creatures. Hitherto, the most sedulous attention has been paid to the concluding period of instruction. This mode is open to many objections, and appears to be extremely defective, to say no worse of it. In the example before us, the errors that are complained of in the ancient system have been corrected, the redundancies have been pruned, and a youth of cultivated talents has been introduced into life with the greatest possible advantages.

Destined to live a member of an enlightened community, and to enjoy the inheritance of laws, dictated in the spirit of wisdom and liberty; Eugenius was early taught to unite to the duties of a citizen, the proud independence and dignified character of man. He had imbibed during infancy, neither prejudices nor falsehoods; his heart was uncontaminated by vicious examples. His first notions were those of propriety and right, and as his understanding improved and ripened, he caught with an intuitive facility the philosophy of those moral principles which had been

practically inculcated into his mind, at a season when it had not been habituated to exercise itself in the subtleties of reasoning and in the analysis of moral phenomena.

The general rules of morality are formed by a constant observation of the fitness and propriety of actions in other men. What is fit to be done, and what excites universal applause, not only calls forth our own approbation, but warms us into a spirit of imitation. What ought to be avoided, we discover in the general sentiment of detestation which attends the perpetration of crime. The propriety of the former and the deformity of the latter quickly excite our emulation or abhorrence. We soon establish a general rule for the regulation of our conduct, which receives a full confirmation from the opinion of the rest of mankind. It is thus that the general rules of morality are formed. They are ultimately founded upon experience of what, in particular instances, our moral faculties, our natural sense of merit and propriety, approve or disapprove of. We do not originally approve or condemn particular actions; because, upon examination, they appear to be agreeable or inconsistent with a certain general rule. The general rule, on the contrary is formed,

by finding from experience, that all actions of a certain kind, or circumstanced in a certain manner, are approved or disapproved of. To the man who first saw an inhuman murder, committed from avarice, envy, or unjust resentment, and upon one too who loved and trusted the murderer, who beheld the last agonies of the dying person, who heard him, with his expiring breath, complain more of the perfidy and ingratitude of his false friend, than of the violence which had been done to him, there could be no occasion, in order to conceive how horrible such an action was, that he should reflect, that one of the most sacred rules of conduct was what prohibited the taking away the life of an innocent person, that this was a plain violation of that rule, and consequently a very blameable action. His detestation of this crime, it is evident would arise instantaneously and antecedent to his having formed to himself any such general rule. The general rule, on the contrary, which he might afterwards form, would be founded upon the detestation which he felt necessarily arise in his own breast, at the thought of this, and every other particular action of the same kind. When we read in history or romance, the account of actions either of generosity or of baseness, the admiration which we conceive for the one, and the contempt which we feel for the

other, neither of them arise from reflecting that there are certain general rules which declare all actions of the one kind admirable, and all actions of the other contemptible. Those general rules, on the contrary, are all formed from the experience we have had of the effects which actions of different kinds naturally produce upon us. An amiable action, a respectable action, an horrid action, are all of them actions which naturally excite for the person who performs them, the love, the respect or the horror of the spectator. The general rules which determine what actions are, and what are not, the objects of each of those sentiments, can be formed no other way than by observing what actions actually and in fact excite them. The regard to those general rules of conduct, is what is properly called a sense of duty, a principle of the greatest consequence in human life, and the only principle by which the bulk of mankind are capable of directing their actions. Without this sacred regard to general rules, there is no man whose conduct can be much depended upon. It is this which constitutes the most essential difference between a man of principle and honor and a worthless fellow. The one adheres on all occasions, steadily and resolutely to his maxims, and preserves through the whole of his

life one even tenor of conduct. The other acts variously and accidentally, as humour, inclination or interest chance to be uppermost. So much has been said on the importance of these rules of conduct, in order to shew that on the most scrupulous and attentive observance of them, depends the very existence and happiness of human society, which would crumble into nothing if mankind were not generally impressed with a reverence for them.

When it is considered, that man as a moral agent, has at least as many duties to fulfil as he has rights to enjoy, that species of instruction which is most likely to communicate the full knowledge of both, ought unquestionably to claim the preference. Exterior ornament and learning, being objects of subordinate consideration, ought of course to constitute inferior objects of attention. We may remove the ignorance of literature, but we can never supply the absolute want of morality; we may infuse into the youthful mind the most pernicious errors, but we shall find it a difficult task to root them out in adult age, and then we shall have real cause to regret the absence of reason; a misfortune that has engendered the greatest part of the calamities of mankind.

7
Morality therefore, which is considered last in the institutes of knowledge, or is too often not considered at all, is here recommended and enforced as a matter of the first private as well as public importance. The means by which its primary lessons are conveyed to the mind, are plain and simple. They may be unfolded, without involving the mind in abstract speculations, or perplexing it with difficult solutions.

Among the many fortuitous events that spring up daily in the world, opportunities of inculcating a moral lesson frequently present themselves; and when the mind has in this manner habituated itself to inquiry and discrimination, it will insensibly acquire a considerable degree of *acumen*, that may be hereafter employed with great emolument. For as it develops its powers of reasoning, it will direct this habit to other purposes of life, and virtue will have so strengthened its seat in the understanding that its principles will be both relished and admired when at a future period, they are examined abstractedly. It is for this reason, we cannot too often, after having laid down a moral principle, proceed to explain it by a practical illustration. A very little industry will qualify any one for this undertaking. The same volubility of speech that is often *admirably* exerted to propagate

the villainous reports of scandal and to tear piecemeal the domestic happiness of others, may be diverted, by this mean, to an honorable and useful end. Even the female sex might here exercise their eloquence to great advantage. They might excite a lively interest not in the cause of calumny but in the cause of truth and virtue; they might attract attention without obtaining it at the expence of their veracity, and amuse and instruct without inflicting pain. The volume of history is before them, and the only difficulty consists in making a proper application of historical examples to the action under consideration. The deduction will be then natural and simple; a child without any further assistance, will attach to it, its proper degree of approbation or blame. There are many useful literary productions well calculated to diffuse this portion of knowledge; but I know of none more serviceable than the selections from history, and the fables of Pilpay, Æsop, Gay or La Fontaine. In fables we find lessons of prudence conjoined with moral instruction, and the fables of Æsop, are better calculated perhaps than any work now extant, to give strength, judgment and acuteness to an infant mind.

But, however useful oral instructions may be, they will be productive of little benefit if unac-

companied by virtuous examples. Longum iter
 est per præcepta, breve & efficax per exempla.
 Examples not only lead to virtue, but they prove
 that it is not impossible to practise it. When a
 child perceives (as he will do quickly) that those
 who advise him, rigidly practise what they advise,
 he will require no stronger incitement to a moral
 life. The constant appearance of harmony and
 tranquillity which result from the practice of so-
 briety and integrity, he will readily discover and
 value, and he will find therein the best arguments
 against vicious inclinations. Children are actua-
 ted by a spirit of imitation, they seldom consider
 the propriety or impropriety of the action they
 imitate, especially if it occur under their paternal
 roof. For what can be wrong, that is done by
 a parent? This is the natural inference of a child.
 It follows from this observation, that the imita-
 tive principle may be directed to the practice of
 what is right, with as much ease and with more
 advantage, as to what is wrong, and that a good
 precedent has at least as fair a prospect of being
 imitated with success, as a bad one. In this
 manner Demea instructed his son, and accord-
 ing to the same mode every upright parent
 ought to educate his child.

Nil prætermitto : consuefacio : denique
 Inspicere, tanquam in speculum, in vitas omnium.

Jubeo, atque ex aliis sumere exemplum sibi.
 Hoc facito---hoc fugito.
 Hoc laudi est---hoc vitio datur.

A just knowledge of the maxims we ought to pursue in the course of life, is the principal object of wisdom ; and virtue consists in putting them constantly in practice, without being ever diverted from so noble a pursuit. Man has a progress in what he performs, whether the career of his life, be encircled with glory or with infamy, whether it be chosen with wisdom or directed by folly. The difficulties that invariably attend and embarrass a vicious course, would be of themselves, we should imagine, sufficient considerations to deter men from the pursuit of it. But the misfortune is, that this demonstration is not apparent, until it is too late to resist the mischief, and avert the ruin. It is no easy task to reform the mind and to expel corrupted manners. It requires no small degree of perseverance and fortitude, to exchange the factitious charms of vice, for the rigid duties of a sober and discreet morality. In the present age of lax morals, it would be almost as arduous an undertaking, as to wash the Ethiopian white. This melancholy truth is familiar to the mind of every voluptuary, from whose bosom the principles of honor and virtue are not

yet wholly eradicated. The difficulty of extricating ourselves from practices which have been long confirmed by the influence of habit, example, and opinion, is daily felt and regretted. Of this we may form an estimate from the example of the drunkard, who before he can emancipate himself from the fumes of liquor, has to subdue that painful, wearisome lassitude which results from debauch, and to silence the frequent calls of a relaxed system for fresh stimulus and support. If then, the return to propriety be attended with such great exertions of self-command and mortification, we need not moralize any further on the monstrous enormity and pernicious tendency of vice. The only lesson of wisdom, is, to avoid engaging at all in pursuits that require such uncommon efforts to abandon hereafter, and to turn aside with indignation and disgust from those gaudy scenes, which, under the name of pleasures, poison the springs of human enjoyment, and most commonly terminate in disgrace, infamy, and premature death.

These important truths should be early impressed on the minds of youth, as the most seasonable, the most urgent, and the most indispensable.

sable part of their education. To end well, we must begin well: at least there is every reason to conclude, that the early habit of virtuous propensities, will lead to the constant practice of virtuous actions. But, to attain this great purpose, parents must be circumspect in their own conduct, and cautious of the doctrines they instil into the minds of children. For, there is nothing said before them without effect. One word of admiration of splendid equipage, or of fashionable levities, dropt from the lips of a father, will create a passion for them in the son, which will grow up with his years, and perhaps never be extinguished. The blind indolence of parents is the origin of half, perhaps of all the disorders that scourge society, and their criminal overfondness effects a moral murder of their children, and commits the happiness of mankind to the sport of chance. *Mollis illa educatio, quam indulgentiam vocamus, nervos omnes et mentis et corporis frangit.*

If, instead of dangerous opinions and delusive enchantments, a child hear nothing but the voice of truth, honesty, and right reason pointing out to him the errors that prevail in the behaviour and conversations of mankind; and if the rules by which they are to be discerned be laid

before him, there is almost a moral certainty that he will escape the dangers of intemperance and be preserved from the contagion of vice. Youth is the season of curiosity and impetuous desires. It will require therefore a skilful and masterly hand to direct the former to proper objects, and the latter to honorable attainments. Nature seems to have given us during our infancy, an inquisitive spirit and a ductile temper, for the express purpose of facilitating our acquisition of the rudiments of knowledge. We ought however, to remember, that notwithstanding this favorable disposition, we are not at liberty to use compulsion, threats or angry expressions, as instruments for the communication of truth. If possible, every acquirement of a child should be a matter of choice; for reason is the enemy of all violence and of all force, and conquers only by gentleness, persuasion, and truth. That species of mental torture, that outrage of all feeling, which would stretch and weary the active genius of infancy, cannot be too much reprobated and discountenanced. The talents with which infancy is endowed, are to be treated and cultivated in a different manner. Every temptation should be held out to the child, that he may demand information voluntarily. It should be disguised under the most

agreeable forms and names, and should steal unobserved into his mind by every avenue. But, let it not be imagined, that I would insinuate by the above observation that truth itself should be disguised. It is the *mode* only of displaying it, not the truth that is here alluded to. This divine progeny of heaven, ought to be contemplated in every light and in every situation, that like the sun in a cloudless heaven, it may illumine and refresh every object which it pierces with its rays.

To teach the human race how to live and how to think, by menaces and terror, is to degrade, vilify and embrate the rational nature of man. This sort of discipline is common to tyrants of every denomination, and it must be acknowledged, that it is well calculated to depress the freeborn and independent mind, and to prepare it *in good time*, for silent obedience and timid slavery. With a rod in our hands, we scourge the child into obedience, and teach him what he is to forget, perhaps to renounce and despise, when he is of an age to think and act for himself. In this we copy too faithfully those arch prototypes of all excellence, who disdainfully call themselves the Lords and Rulers of mankind; whose insolent and ambitious

policy, consists in teaching grown up children the lessons of duty and obedience, with the bayonet and the halter. Infidelis recti magister est metus.

Emulation is a powerful incentive to youth, and kindles a flame for excellence that is capable of performing any thing. Quintilian, after having noted the different dispositions of the mind in children, draws in a few words the image of what he judged to be a perfect scholar. I like, says he, a child who is encouraged by commendation, is animated by a sense of glory, and weeps when he is out-done. A noble emulation will always keep him in exercise; a reprimand will touch him to the quick, and honor will serve him instead of a spur. We need not fear that such a scholar will ever give himself up to idleness. After the authority of this great man, whose whole life was devoted to the arduous duties of public instruction, and whose experience on the subject was very extensive, there can be no hesitation, in determining which of the two modes of instruction we should prefer, the system of fear, or the system of emulation.

Having sufficiently proved in the foregoing remarks, that we cannot begin too early to inculcate moral truths in the minds of children,

and that their stock of ideas should be furnished and increased, more from a motive of curiosity and a habit of observation, than from the harsh influence of fear; I shall close this preliminary chapter with some remarks on the advantages that necessarily result from an unprejudiced, liberal, and well cultivated understanding.

Montesquieu has observed, that the laws of education are the first impressions we receive; and as they prepare us for civil life, each particular family ought to be governed pursuant to the plan of the great family that comprehends them all. The former part of this proposition is perhaps not liable to any objections; but the latter should be received with some modification. No one will deny the propriety of rendering a part of education conformable to the state of society, and subservient to the general interest of the community in which men are destined to live and to act. For, the general rules by which we regulate our conduct, are for the most part, formed from the impressions which we receive in early life. Our mode of action is determined by the sense of propriety or impropriety, or the knowledge of right and wrong which we then acquire. This know-

ledge is chiefly obtained by our observations on the good or evil tendency of actions, and by our subsequent reflections on the degree of praise or blame attached to them by the general decision of mankind. A reference therefore in the plan of education to the established order of society, is, in this sense, wise, just, and politic ; but to render it *entirely* subordinate to existing forms of government, appears irrational, unjust, and unnatural. I am well aware that the manners and habits of the generality of men are in a great measure derived from the established practices, institutions and laws of their several countries ; and that as manners usually derive their force from laws, so on the other hand there is a reciprocity of influence, and laws are often found to derive their existence from the universal force of established manners. But, with equal truth and with more justice, we may contend, that education *can* give the tone to all of them. It can render contemptible the longest established usages ; it can render perfectly ridiculous the greater part of the opinions of men ; it can reject the most ancient precedents, and abolish and explode laws, venerable for their antiquity, and transmitted to mankind through a long succession of ages.

If a child were to be educated in Great Britain agreeably to the maxims and discipline of the Spartan school, he would not only be liable when he reached to years of maturity, of being universally regarded as a savage, but he would be exposed to general detestation and contempt. And if he were so fortunate as to escape the gallows (which seems almost impossible) he would at least smart incessantly under the lash of ecclesiastical censure, and do penance quarterly in a white sheet, perhaps oftener, in foro ecclesiæ. Nothing can shew more forcibly the influence of education than the case which has been here adduced. The same observation will apply equally to an Englishman whose education is *totally* different from the hereditary prepossessions and established customs of his country. But, this remark will not extend beyond certain limits. All the knowledge that is necessary to teach a man his duties as a citizen, I have before shewn, he ought to be perfectly conversant in. But there is a further knowledge to be acquired, namely, all that regards the dignity of the human character, and all that tends to promote its excellence. An individual thus educated may change the destiny of a nation, and may improve and ameliorate the laws, government, manners, and even the education of his countrymen.

To accomplish this purpose, nature alone should be consulted; and art called in solely to assist her progress; the mind thus left to unfold its own powers, education would be unprejudiced and in a great measure uncontrolled. On these principles, we must receive the latter part of the great Montesquieu's proposition with caution, reserve, and limitation. He states as a principle, what is only a fact,

In conformity to the principle which he has endeavoured to establish, he has asserted that the laws of education will be different in each species of government; in monarchies they will have *honor* for their object; in republics *virtue*; in despotic governments *fear*. This observation is more brilliant than just. Is honor excluded from republics or virtue from monarchies?---the history of man presents to our minds the most eminent examples of exalted virtue exhibited in monarchical states as well as in republican. But, it has been the glorious lot of republican governments to have the exploits of their fellow citizens recorded with all the majesty and pomp of human eloquence. Their actions were doubtless such as in general deserved applause, but their historians have sometimes magnified little things,

while the greatest actions performed under monarchical governments have been almost lost to the world, for want of authors sufficiently skilled to display them in their full lustre. Atheniensium res gestæ, sicut ego existumo, satis amplæ, magnificæque fuere ; verum aliquanto minores tamen, quam fama feruntur : sed quia provenere ibi magna scriptorum ingenia, per terrarum orbem Atheniensium facta pro maximis celebrantur ; ita eorum qui ea fecere, virtus tanta habetur, quantum verbis ea potuere extollere præclara ingenia.

If, indeed, the principle of Montesquieu, were to be admitted as an universal truth, it would be high time to put down all the monarchies of the earth ; for according to the modern acceptation of the word *honor*, it is one of the most pernicious principles that ever went forth to corrupt and delude the world. The necessary object of man in every situation, is happiness. The circumstances conducive to it, health, security, and liberty, are sufficiently understood to render restraints on them painful and oppressive. As no regulations of fashion and opinion can suppress the desire of health ; so in government no prepossession, custom or authority, can extinguish the desire of liberty.

It is true, these words are subject to various interpretations, and they have generally been invented to favor the injustice of power, not to shelter the disobedience of the people. Even licentiousness, which all tyrants affect to dread, when chaining down the quivering muscles of their wretched slaves, has ever been the effect of despotism, not of liberty or indulgence.

No philosopher, sincerely in the interests of mankind, would wish to give any thing in government the denomination of *principle*, which may be the instrument of general injustice and misery. That false honor is the actuating passion of monarchies may be true, as folly, or even insanity may be the actuating impulse of multitudes. In all intercourses with regal power, men may find it their interest to accommodate this passion, as they may in their connections with the foolish or insane, to accommodate a capricious or impetuous impulse. But we have faculties to distinguish truth from falsehood as we distinguish health from sickness. And though it be not always practicable to bestow security or liberty on the subjects of an established monarchy, as it may not to correct established folly or to remove confirmed insanity; there will remain in the human heart a

desire to effect this purpose, which no sophistry can confound, no power can suppress. Education is the natural guardian of this sacred principle, and where barbarous prepossessions have been meliorated, and iniquitous customs abolished, education has been the general instrument.

Attempts have been made to convert this domestic occupation, into a political employment. And if it were the ultimate object of every state to preserve its constitution at all events; it would be prudent to submit education to its power. But the object of political states, is the security or happiness of the citizens; the provisions for that purpose being always hastily and imperfectly arranged, public institutions, like all human inventions, are improveable, and the principal means of their improvement, are in education. If it were practicable to control and extinguish parental affection, and to consign education to the civil magistrate, the experience and reason of mankind would revolt on considerations of inexpediency. Modern governments, under all the disadvantages of their forms, have admitted considerable meliorations from emancipated education. Where peace and tranquillity give access to

civilization and knowledge, manners imperceptibly correct the inconveniences of institutions and laws ; and manners arise immediately from education. Monarchies, distantly removed from popular influence, by tolerating domestic instruction, open the avenues of information, and harbor philosophers, the best and most distinguished friends of mankind. If the instruction of youth had been strictly and scientifically referable to the ruling principles of particular states, would Harrington, Sydney, and Locke have written on government ; or if Montesquieu had been educated at the Sorbonne, would he have published the *Spirit of Laws* ? If only to produce such men, the patriots of modern times, education should be withheld from the grasp of the magistrate.

To avoid the odium of oppressive encroachment, governments have sometimes exchanged power for patronage, and furnished colleges and schools with professors and masters, whose promotion are at the will of the administration. This is something more than an exchange of terms, and it is countenanced by high pretences of utility. But the idea of settlement, of permanence, or of perpetuity incident to the inventors of political institutions, is

hostile to the constant agitation or the innovating spirit which may arise from domestic education. It may be difficult to determine, "whence this pleasing hope, this fond desire, this longing after immortality," in societies, as in individuals? Nature is perpetually employed, in producing, decomposing, and reproducing; and does not warrant the idea of eternity, where forms and constitutions are concerned. She is æconomical of materials; and impresses an opinion of their immutability; but she is lavish of forms, which are incessantly fluctuating, dissipated, renewed, and blended in indefinite variety. All science is formed by lessons from nature; but in the present case, we directly oppose the intimations of nature; we annex the idea of perpetuity to forms, of which they are incapable, and would annihilate first principles which are durable and immortal as the materials of the universe. In this unnatural and absurd manner, the happiness of society is sacrificed to the security and permanence of institutions and systems, intended, or said to be intended to procure that happiness.

Men will never make considerable advances in the science of government, until they imitate nature in regard to forms, and particu-

larly in sacred attentions to principles. No cause is so unfavorable to human happiness, as erroneous attachment to systematic instruments of misery. Persons employed in directing the awkward operations of a mischievous machine, may have, or may think they have an interest in preserving it, as a better might be committed into other hands: they who feel its inconveniences are artfully induced to dread imaginary consequences of its decomposition, nay, real difficulties may arise, from the necessity of violently dispossessing them of mischievous privileges. And as men in the habits of modern societies are more disposed to *endure* than to *commit* injuries; and rather to "bear the ills they have, than fly to others which they know not of," abuses are continued, until in obedience to an immutable law of nature, forms and constitutions are annihilated, by the extinction or destruction of the people.

Truth in the moral is analogous to health in the natural world. Either may be checked and impeded, in the most favorable circumstances of physical or intellectual constitutions; but there is an unceasing effort, congenial with animation or existence, to restore them when

lost, and when enjoyed, to improve them into perfection. That a fine lady will sacrifice health to avoid appearances unsuitable to her station, and that the laws of education *will be* relative to her conduct, these are facts which no man will dispute ; and it is a fact that the laws of education in monarchies *will be* relative to the passion of false honor which actuates them. But the fact does not establish a principle in political science, and the word used by Montesquieu, is not only unguarded and inaccurate, but extremely pernicious.

To recur to the allusion. It could not escape the penetration of the fair sex, that a certain degree of debility, a certain delicacy and precariousness of health, would fix the attention and call pity to the aid of love. These arts of little minds are successful, and generally practised. It is therefore a maxim in those pernicious institutions called boarding schools, that a young woman designed for fashionable life, and all young women are so designed, must not be in full health. The words *robust* and *masculine* are used to soften the absurdity ; but the meaning of the maxim is strictly as I have stated it. Though this be a fact, having the authority of established rules, no man of science

will state it as a principle of education. The inaccuracy is of importance in the case before us, because education, the first duty of life, the general instrument of knowledge and goodness, is directed by no certain laws.

Plato has observed with great propriety, that the end of the education and instruction of youth as well as the end of government, is to make men better ; and that whoever departs from this rule, however meritorious he may otherwise appear to be, in reality deserves neither the esteem nor the approbation of the public. The greatest erudition is of no value, if unattended with probity. It is worse ; it is dangerous to the welfare and tranquillity of society. Quintilian in his admirable treatise, has laid it down as a rule in forming a perfect orator, that none but an upright man can merit that name, and therefore he asserts as a necessary qualification, that he should not only speak well, but also possess all the moral virtues. *Oratorem instituimus illum perfectum, qui esse nisi vir bonus non potest; ideoque non dicendi modo eximiam in eo facultatem, sed omnes animi virtutes exigimus.* Mr Justice Blackstone has very wisely adopted a similar opinion in his introduc-

tory lecture on the study of the law, in which after having enumerated all the qualities of the head, he adds to them those of the heart, as indispensably necessary to form a truly valuable English lawyer, a Hyde, a Hale, or a Talbot. And Dr Blair has with great elegance and propriety, suggested the same idea as a necessary ingredient in the character of a sublime writer. But this just sentiment is not to be restricted to any particular profession or order of men. The knowledge and practice of morality is the voice of nature, which is unbounded and universal : and however expedient it may be in those whose stations in life, render them objects of imitation or esteem to perform with the most rigid punctuality every moral duty, it must not be forgotten, that the conviction of the utility of the practice, should make it the commonsense and common respect of all mankind.

Man is not made for himself alone ; he has an allotted station in society, to the interest and happiness of which his education ought to contribute ; and as in a concert of music, he should qualify himself to perform his part well, that the harmony may not be imperfect or interrupted. But amongst the infinite variety of

occupations which divide mankind, the employment which the state is most concerned to see well-filled, are such as require the brightest talents, and the most exalted degrees of knowledge. Other arts and professions may be neglected to a certain point, and the state not be remarkably worse for it. But the case is otherwise with employments which require wisdom and conduct, as they give motion to the whole body of the state, and having a greater share of authority, more directly affect the success of the government and the prosperity of the public.

The glory of every nation depends on the virtues of its citizens, not on its treasures or on the monuments of art. To judge of the superior eminence of any country, we must determine it by this criterion and by the superiority of its knowledge. Useful learning constitutes the principal difference between private individuals as well as between nations. Athens was only a small territory, yet she was the hive of literature and of Greece, and sent forth the noblest historians, the most eloquent orators, the ablest statesmen, and the greatest military commanders.

The greatest pains were bestowed on the education of her youth, and when they grew up, the state was amply remunerated by the talents they displayed. Greece, which was not more populous than Scotland, has illustrated its name in story by the glories of its citizens. From a cluster of little principalities it soon became republics ; and being united, both by their near neighbourhood and by the ties of the same language and interest, they entered into the closest intercourse of commerce and learning. There concurred a happy climate, a soil not unfertile, and a most harmonious and comprehensive language ; so [that every circumstance among that people seemed to favor the rise of the arts and sciences. Each city produced its several artists and philosophers, who refused to yield the preference to those of the neighbouring republics : Their contentions and debates sharpened the wits of men : a variety of objects was presented to the judgment, while each challenged the preference to the rest : and the sciences not being dwarfed by the restraint of authority, were enabled to make such considerable shoots, as are, even at this time, the objects of our admiration.

Rome, which was at first a horde of robbers

and banditti, spread her arms afterwards throughout the known world, and carried every where conquest and civilization. After having been the terror of the world, she gave it rest, and became the subject of its wonder and imitation by her excellent productions in arts and sciences, which alleviated in a great degree, the yoke of superiority she had imposed upon them. Egypt has been considered as the cradle of the sciences, and Africa, was once renowned for its great warriors and learned men : but now, all these nations, through the neglect of literature, are grown absolutely unfruitful and fallen into barbarity, without having produced one solitary individual in the revolution of so many ages, who has distinguished himself by any talent, called to mind the merit of his ancestors, or caused it to be remembered by others. While the very reverse has happened to those barbarous children of the north, who were once the objects of their contempt. They were regarded for a course of ages as rude and barbarous, as having discovered no taste for works of ingenuity and wit. But as soon as learning sprung up among them, they sent abroad proficient in all kinds of literature, who in point of solidity of understanding, depth and sublimity of thought, have equalled, if not surpassed

whatever other nations have at any time produced.

Of the influence of science on the general character of nations, we may judge from the numerous instances of the rise and fall of states, with which history is enlivened or depressed. There is not only a diversity in nations according to their comparative degree of culture, but there is likewise a remarkable dissimilarity in the same nation according as it has cherished or neglected the improvement of the understanding. In Carthage, where it was totally neglected, eloquence, poetry, history, and philosophy were entirely unknown. A Carthaginian philosopher would pass for a prodigy. In the midst of so great an indifference for literary compositions, the education of youth was extremely imperfect and deficient. It consisted entirely in the knowledge of writing and casting accounts, and in that species of instruction which regarded traffic only. Belles Lettres, history, philosophy, were little estimated. In the later periods of its government, they were interdicted by the laws, which expressly forbid any Carthaginian to learn the Greek tongue, lest he might be capable of corresponding by letters or viva voce with the enemies of the state.

Factum senatus-consultum ne quis postea Carthaginensis, aut literis Græcis, aut sermoni studeret; ne aut loqui cum hoste, aut scribere sine interprete posset. What could be expected from so harsh a policy? we read in no part of their history of that urbanity of manners and of those sentiments of virtue, which a good education always inspires. The few great men which this state produced, must have owed their merit to an happy natural genius, to rare talents, and to a long experience, acquired without the aid of any preliminary instruction. Hence, the merit of their great men was tarnished by the most degrading vices, and by the most cruel passions; and a brilliant virtue is hardly seen without some odious vice to accompany it. That generosity and noble magnanimity, which, supported by uniform and enlightened principles, illustrated the Grecian and Roman names, were not to be found in Carthage.

We are told that Aristodemus, tyrant of Cumæ, used all his endeavours to banish courage, and to enervate the minds of youth. He ordered that boys should let their hair grow in the same manner as girls; that they should deck it with flowers, and wear long robes of different colors down to their heels; that when

they went to their masters of music and dancing, they should have women with them to carry umbrellas, perfumes and fans, and to present them with combs and looking glasses whenever they bathed. This education lasted till the age of twenty ; an education, says Montesquieu, that could be agreeable to none but a petty tyrant, who exposes his sovereignty to defend his life.

We daily observe, that in proportion as the sciences make their progress in countries, they transform the inhabitants into new creatures ; and by inspiring them with gentler inclinations and manners, and supplying them with better forms of government and more humane laws ; they raise them from the obscurity wherein they had languished before, and engage them to throw off their former roughness. Thus, they prove evidently, that the minds of men are very near the same in all parts of the world ; that all honorable distinction in regard to them is owing to the sciences ; and that according as these are cultivated or neglected, nations rise or fall, emerge out of darknes, or sink again into it, and that their fate in a manner depends upon them.

The advantages of education and learning

are more lasting and extensive than those of arms. The courage of a soldier, does little service to his country after his death, the benefit of it being usually confined to one age ; whereas, public provisions for society are framed, and the constitution adjusted to the temper and convenience of the people ; of the happy effects of which, remote posterity is often sensible. And as the consequences of valor, seldom reach beyond the death of him who shewed it, so there are few the better for it, except those for whom a man engages ; and they are commonly none but his countrymen. But learning, by inventing and improving the arts and sciences, scatters its favors in a much larger compass ; becomes an universal benefactor, and obliges mankind in its most comprehensive latitude of place and time. The successes of learning are naturally of a very innocent tendency, and under good management, prejudicial to none. The conquests of arts are not like those of arms, gained by slaughter, and attended with ruin and desolation. No ; here is nothing routed but ignorance and error ; nothing destroyed but obstinate humor, and savage disposition. *Emollit mores nec sinit esse feros.*

The mind always repays with usury the care we take to cultivate it, and is nourished and strengthened by the sublime truths supplied by study. It encreases and grows up with the great men, whose performances are the objects of its attention, in the same manner as we fall into the practices and opinions of those with whom we converse. It strives by a noble emulation to attain to their glory, and is encouraged to hope for it from the success which they have met with. Forgetful of its own weakness, it makes noble efforts to soar with them above its ordinary pitch. Unfurnished with a sufficient stock in itself, and confined within narrow bounds, it has sometimes little room for invention, and its forces are easily exhausted. But study makes up its defects, and supplies its wants from abroad; enlarges the limits of the understanding by foreign assistance, extends its views, multiplies its ideas, and renders them more various, distinct, and lively. We are taught by it, to consider truth in various aspects and different lights; we discover the copiousness of principles, and are enabled to draw from them the remotest consequences.

We come into the world, surrounded with a cloud of ignorance, which is encreased by the false prejudices of a bad education. By study

the former is dispersed, and the latter corrected; it gives rectitude and exactness to our thoughts; instructs us how to range in due order whatever we have to speak or write, and presents us with the brightest sages of antiquity as patterns for our conduct, whom in this sense, we may well call with Seneca, the masters and teachers of mankind. But, it is not in the acquisitions of science alone, that we are to contemplate the advantages of learning. By laying before us their judgments and discretion, we are more prepared for the duties of active life, and enabled to walk with safety under the direction of such chosen guides; who, after having stood the test of so many ages and nations, and survived the downfall and wreck of so many empires; have deserved by the common consent of all mankind, to be esteemed the sovereign judges of good taste, through all succeeding times; and the most finished models of the highest perfection in literature. A mind cultivated and matured by such assistance, soon casts a lustre around it, which is easily perceived by men of learning and by men of the world.

It is impossible to point out any circumstance that proves more the degeneracy of

an age, than a general negligence of those portions of knowledge, which contribute to improve the understanding and amend the heart. In a period when superficial acquirements pass for science, and whatever glitters for sound sense, we cannot be surprized to find a general indisposition to the labors of solid learning. All orders of men, act as if combined to operate a change in the modes of thinking ; and though for the honor of our country, we can affirm that real substantial knowledge, is still relished and flourishes among us, yet it cannot be denied that there is an universal relaxation of principles, which depend essentially on moral probity ; and that science appears to be in the higher classes of society banished to the Academic shade. If, without wasting the most precious moments of our existence in useless and frivolous studies, we have discovered a more comprehensive mode of information than was practised by our forefathers, we shall do well to adopt it ; but let us be careful at the same time, that while we endeavor to abridge the elements of knowledge, we do not suffer all science to elude our grasp, and encounter in its stead a vain, false, and superficial learning. A regular distribution of time, a temperate application to study, will prepare our gentry for

the fulfilment of every social duty, with credit to themselves, and honor to their country. But to neglect totally the improvement of mind, is a breach of justice in every individual, that no fortune, no pre-eminence of station, no dignity of birth can repair. Such a conduct would dishonor instead of ennobling rank, and would give but a melancholy presage of the ability, and public spirit of the nation.

Men of business and of industry, in the inferior stations of life, retain their occupations; and are secured by a kind of necessity, in the possession of those habits, on which they rely for their quiet, and for the moderate enjoyments of life. But the higher orders of men, if they relinquish the state, if they cease to possess that courage and elevation of mind, and to exercise those talents which are employed in its defence, and in its government, are, in reality, by the seeming advantages of their station, become the refuse of that society of which they once were the ornament; and from being the most respectable, and the most happy of its members, are become the most wretched and corrupt. In their approach to this condition, and in the absence of every manly occupation, they feel a dissatisfaction and languor which they

cannot explain : they pine in the midst of apparent enjoyments ; or, by the variety and caprice of their different pursuits and amusements, exhibit a state of agitation, which, like the disquiet of sickness, is not a proof of enjoyment or pleasure, but of suffering and pain. The care of his buildings, his equipage, or his table, is chosen by one ; literary amusement, or some frivolous study, by another, the sports of the country, and the diversions of the town ; the gaming table, dogs, horses, and wine, are employed to fill up the blank of a listless and unprofitable life. They speak of human pursuits, as if the whole difficulty were to find something to do : they fix on some frivolous occupation, as if there was nothing that deserved to be done : they consider what tends to the good of their fellow creatures, as a disadvantage to themselves : they fly from every scene in which any efforts of vigor are required, or in which they might be allured to perform any service to their country. We misapply our compassion in pitying the poor ; it were much more justly applied to the rich, who become the first victims of that wretched insignificance, into which the members of every corrupted state, by the tendency of their weaknesses and their vices, are in haste to plunge themselves.

All these observations, it may be said, sound extremely well on paper; they have been repeated a thousand times from the earliest ages, but you cannot alter the destinations of men, nor change their habits and dispositions. To this, I answer, that the argument here alledged, proves incontestibly the importance of the subject, and that although we be not entirely successful in reforming corrupt manners and institutions, we may nevertheless reform a part of them. The friends of human nature are therefore not justified in desisting from so laudable, so peaceable, so honorable an enterprise.

Whoever can contribute to so useful an end, whoever can recommend an arrangement so select, as to œconomize time, while it conveys an equal if not a greater portion of instruction than that which is required, and more quickly lost, by the present fashionable mode, will have executed a work of great and serious utility, not only to the rising generation, but to all posterity. For the effects of education are felt in every circumstance and in every condition of human society; in the laws that are enacted, the arts that are cultivated, the sciences that are studied; in the virtues and happiness, or in the corruption and vices of mankind.

A national and well grounded education is the best security of public order and of public freedom. It is the want of it that engenders all the crimes and calamities of mankind ; it is the possession of it, that elevates a community to the highest rank in the society of nations. It is this, which has made us what we are ; it is this, which will make us the emporium of arts and sciences, and maintain for us that reputation we have so justly earned, and which I trust we shall never forfeit, of being the asylum of order, justice, philosophy and freedom.

Whoever can contribute to so useful an end, who can recommend an arrangement so useful, as to economize time, while it conveys an equal if not a greater portion of instruction than that which is required, and more deeply lost by the present fashionable mode, will have executed a work of great and serious utility, not only to the rising generation, but to all posterity. For the effects of education are felt in every circumstance and in every condition of human society ; in the laws that are enacted, the arts that are cultivated, the sciences that are studied ; in the virtues and happiness, or in the corruption and vices of mankind.

CHAP. II.

On the best mode of Education.

No subject has more exercised the talents of the philosopher and the legislator, than that which we are now going to examine. They had great reason for devoting so much of their time and thoughts to it, if it be true, as I have endeavoured to establish in the preceding chapter, that a cultivated mind, is a matter of essential importance, both to the individual and to the community. The ancients, considered it as a national object, and as the first point of legislative wisdom. Their views were directly referable to the spirit and forms, of their several constitutions. The different plans of education, recommended by the moderation of Solon, and by the vigorous mind of Lycurgus, varied materially; yet each of them was considered as absolutely necessary, to the well being and security of the two states. A rigid morality enjoined by law, and a severity of discipline, that disdained the seductive charms of eloquence and

of luxury, were calculated to make, and they *did* make, a people of warriors. For a long succession of ages, Lacedemon raised her brazen front in Greece, and illustrated her little empire, by her vigor, her virtues, and her prowess. While politer Athens, directing the attention of her youth, to the magnificence of art, and to the dignity of science, as well as to all the noble views of ambition and of human glory ; was long enabled to balance the power of her boisterous rival, and to hold with Sparta, a divided sway over the Grecian republics. Sparta, indeed, sustained for a longer time her independence ; and would have survived the general wreck of Grecian liberty if she had not suffered her primitive institutions to become corrupted, and if she had cherished the maxims of the sage, by whose wisdom her power had been founded, and even perpetuated for several centuries. But amid the dark gloom, that overshadowed the declining age of Athens, we recal to our minds her former trophies at Marathon, Salamis, and Plataea ; and admire with raptures that excellent plan of education, which nurtured in the bosom of the state, a constellation of great men, whom in dangerous seasons she invested with her destinies, and sent abroad to fulmin over Greece, and rouze all its people to arms and liberty.

Nor ought we to forget the influence of that philosophy and commanding eloquence, which resounded from the tribunes of Athens, and which were eagerly heard by admiring multitudes. They gave a delicacy of taste, and even a refinement of thought to the commonalty, which has never since been recognized in the vulgar of any age or nation. The fame too of her Areopagus will exist, as long as the idea of justice shall be preserved in the memories of men. All these things were the fruits of a liberal, and well chosen mode of education ; and although I have reprobated in the last chapter, the prejudice that would confine it within the trammels of ancient systems, and lavish away the precious moments of youth in the systematic learning of sophistry, and the jargon of the schools ; yet it should not be supposed that those arguments are *entirely* hostile to a just consideration of the circumstances of government and society. If the legislators of antiquity, made the education of youth, in a great measure, subservient to the principle of their several political constitutions ; they took care at the same time, to obviate as much as possible, the objections which are raised against such establishments. No advantage therefore, can be gained from the example of the ancients,

against the propositions that have been stated in the foregoing chapter.

The opinions which have so often divided the learned on the best mode of education, are the most powerful evidences of the importance of the subject. Happily, for the repose of mankind, the discussion of this interesting question has no where flooded the earth with the blood of its inhabitants. Having nothing in common with the hot ambition and furious passions of men, it has been agitated with temper and moderation, and at the same time, with an earnestness suited to the dignity of the subject. Far different from our usual contests, the only weapons employed on this occasion to convince, have been reason and experience. It is true, there were no objects of dishonorable ambition or avarice to gratify; the only invitation to the efforts of philosophy, was the progress of reason; and the only reward of philosophers, the social happiness of man.

Many ages have elapsed, since a controversy began on the most efficacious mode of instructing youth; some preferring a public, and others, a private education. The question is not yet determined; nor is it likely to be deter-

mined, until by repeated and convincing experiments, men become disposed to abandon their old habits, and to adopt a more expeditious and more useful course of learning. Until that event takes place, there can be no impropriety in suggesting methods, which, if they cannot perfect the system of instruction, may at least have a tendency to improve it. To effect this rational purpose, it will not be necessary to alter the course of knowledge, but only to abridge the means employed for its acquisition. For what is education?---Education and instruction, says Hooker, are the *means*, the one by *use*, the other by *precept*, to make our natural faculty of reason both the better, and the sooner to judge rightly between truth and error, good and evil. By preserving this accurate definition, clearly and distinctly in our minds; we shall soon discover at what stage of life all elementary studies should cease. The moment when it should commence, reason sufficiently indicates. At our entrance into the world, we are helpless and ignorant; and the mind, like blank paper, is capable of receiving any impressions which may be made upon it. This then is the point, where we ought to begin, nor should we desist until the mind is competent to form its judgments without the direc-

tion of the parent or tutor. As education is merely the instrument of facilitating our attainment of this capacity, it should be laid aside as soon as the object is attained. This is the point where it should end; but no determinate period can be assigned for its accomplishment, because it must vary according to the genius, application, and health of the pupil. The law of England has fixed the age of manhood at twenty one. It very properly makes no allowance for any extraordinary exceptions that may arise, because in the formation of every law, or general rule, it is impossible for the legislator to foresee the particular cases that may spring forth to defeat the end of that law. Common utility is always preferred to individual advantage. But, notwithstanding the propriety of the general rule, it must be admitted, that there are many bright geniuses, which have acquired more real knowledge at sixteen, than others at twenty six; and this chiefly arises from their minds having been early directed to the acquisition of the real, substantial knowledge of things. This observation was fully verified in the education of Eugenius, whose hours were not suffered to glide away in a frivolous attention to those elegant *nothings*, which please the superficial observer, and always mortify the

philosopher ; but they were uniformly devoted to those studies alone which are useful.

It is evident that this is the best mode of education ; because man always appropriates his time to what is useful, before he has formed any notion of what is elegant. The infancy of an human being and of societies bear an exact resemblance to each other ; and the rapid progress of the individual from a state of total ignorance to a state of knowledge, is a correct miniature of the rise and progress of social institutions. The latter, indeed has required a long revolution of ages to bring them to any degree of maturity ; whereas the former is very often the work of a single life. The cause of this difference, it will not be difficult to explain. A child finds all the artificial discoveries of society ready at his hands ; they appear to him like so many originals, as ancient as nature itself. His only object therefore is, to have their several properties unfolded, without inquiring who was the inventor, or when the thing under contemplation was invented. But this is not applicable strictly to societies in their early condition ; for every new discovery is the result of necessity, and the mind being intent only on the means of self-preservation, is little disposed to

range into the unexplored regions of science. To provide for his immediate wants, constitutes the whole philosophy of the savage ; the investigation of the phenomena of nature, and the philosophy of mind, are left to times posterior to the first organization of communities ; when men enjoy in security, the advantages of order, leisure, and civilization. Ignorance and wonder are the attributes of the unlettered barbarian ; doubt and investigation, of the enlightened citizen.

These observations are not advanced for the purpose of depreciating the value, which the generality of men, affix to such acquirements. On the contrary, the elegant and frivolous trifles, which are so apt to please the vanity of the indulgent parent, having, by the scandalous negligence of mankind, become incorporated in the system of education, ought to be attended to, because from this circumstance, the world attaches to them a greater degree of importance, than they would otherwise deserve. All that can be attempted in this age of dissipated manners, is to implore those who are concerned in the guardianship of youth, not to appreciate too highly such pursuits, nor to permit them to swallow up the more

useful occupations of the mind. For after all that can be said in their favor, it is universally acknowledged, even in the circles of levity and fashion, that a man of knowledge and virtue, is a more reputable character, than the agreeable piper, the correct fiddler, the pretty dancer, or the merry coxcomb. The attractions of the latter are momentary, but the impressions which the former leave on the mind are deep, and lasting ; his name is never mentioned without respect, nor his character noticed without reverence and esteem. The philosopher, therefore, who is not too nice and censorious in his observations on human affairs, will not openly avow himself hostile to such propensities, as long as they do not tend directly to vitiate the understanding, or to corrupt the heart. The character of a Timon or a Diogenes described by the pen of history may serve at this distance of time to entertain our minds ; but if we look deeper into their dispositions, we shall find no epithet so proper for them as that of ill natured madmen.

In conformity to these observations, a proper degree of attention was always paid to what are called the accomplishments of life, but they were never allowed to supercede for a moment,

more useful studies. Every occupation was estimated according to its future utility ; and as those points which are deemed essential to the demeanor of a gentleman should not be neglected, and require but a small portion of time to acquire, Eugenius was early and properly attended by the best masters in the several departments of fencing, military exercise, horsemanship, and above all of dancing. These accomplishments and the art of swimming gave a suppleness to his limbs, a grace to his actions, and an elegance of address, that always obtained him the favorable prepossession of the company to whom he was introduced ; his talents and virtues completed the conquest of affection, and converted the passing applause of the human herd into a solid and durable esteem. The excellent letters of Lord Chesterfield to his son, were always before him, and inspired him with a laudable desire of uniting to the character of a man of knowledge, the accomplishments of a gentleman.

A cold pedantic spirit has excited against those admirable letters, a considerable degree of unjust and acrimonious censure. But, they will assuredly outlive the calumnies that have been cast upon them. They will be found, by

a diligent observer of men and manners, to convey at once the best precepts of morality, with the best recommendations for the attainments of literary and political knowledge. They point out in chaste and elegant language, the many dangers that surround and too often allure the unwary and ingenuous youth, and unfold in all their horrors, the mischiefs attendant on a life of dissipation and vice. The bottle, the gambling table, the sluggard, the bravo, and the prostitute are placed in their proper colors, and while the description nauseates, it animates the soul to shun the phantoms of pleasure, and to listen to the admonitions of prudence and virtue. The most predominant vices of the gay world are probed into with the hand of a master, and their pernicious influence on the minds, characters and fortunes of all orders of men, are developed with censorial criticism. If he display the poison, he presents also the antidote: if he recommend caution, it is because hypocrisy has seated its empire in almost every breast. Let his writings therefore, be judged with impartiality, by every discreet parent, and the character of Chesterfield will appear in the light of a well informed monitor, not as an aged voluptuary, the pander and pimp of youth. Nor let it be thought that

these sentiments have a tendency to foster or to encourage licentious manners. Decorum is an attribute of virtue and an essential requisite in all polished communities ; its effects are more extensive than is generally supposed by the great part of mankind. If it be not calculated to strengthen the understanding, it operates at least, most powerfully on the morality of a people, and establishes a tribunal within the breast, which, in checking disorderly passions and restricting the conduct of men within the rules of propriety, usefully supplies the deficiencies of municipal law. Such means, therefore, as appear well adjusted, to promote this end, and to pave the way, for an happy introduction into life, may be considered in the light of secondary objects of education, essential indeed in themselves, but not of sufficient importance, to preclude rational employments. A man of knowledge *can* exist without being a man of fashion, and may illumine the sphere in which he moves ; but a man of fashion, without knowledge, is a mere moving puppet, the slave and echo of other men's opinions, without having any of his own. The mind thus benumbed by long habit, and want of exertion, recites at random the floating sentiments of the day, without being capable of combining

any opinions that require attention or abstraction. To be a good story teller, a retailer of anecdotes, or a servile copyist, are the highest points of perfection to which such animal natures are susceptible. Plain ignorance may oftentimes receive instruction, but the insipid man of fashion is so far from improving or even hearing of it, that he makes it only the subject of his thoughtless jest and idle railing, under which he shelters his own brutish ignorance, and endeavors to make others as guilty of it as himself. The man of knowledge, on the contrary, who unites to his superior intelligence a moderate proportion of fashionable manners moves forward with the greatest advantages, and makes himself endeared while he is respected. To discard these embellishments of life, as beneath the notice of a philosopher, would be to become a misanthrope, hateful to himself and odious to the rest of mankind. On the other hand, to affect knowledge without possessing it, or to reject the improvement of the mind and to travel though the world, merely by dint of bows, grimaces, and cutting capers, is to be nothing less than a driveller, useless to himself and a dead stock on the community in which he lives.

A virtuous and profound philosopher, in some observations "On the Influence of Custom and Fashion upon Moral Sentiments", has observed, that though the influence of custom and fashion upon moral sentiments, is not altogether so great (as upon our notions of beauty and deformity) it is however perfectly similar to what it is every where else. When custom and fashion coincide with the natural principles of right and wrong, they heighten the delicacy of our sentiments, and increase our abhorrence for every thing which approaches to evil. Those who have been educated in what is really good company, *not in what is commonly called such*, who have been accustomed to see nothing in the persons whom they esteemed and lived with, but justice, modesty, humanity, and good order; are more shocked with whatever seems to be inconsistent with the rules which those virtues prescribe. Those, on the contrary, who have had the misfortune to be brought up amidst violence, licentiousness, falsehood, and injustice; lose, though not all sense of the impropriety of such conduct, yet all sense of its dreadful enormity, or of the vengeance and punishment due to it. They have been familiarized with it from their infancy, custom has rendered it habitual to them, and they are

very apt to regard it as, what is called, the way of the world, something which either may, or must be practised, to hinder us from being the dupes of our own integrity. The objects with which men in the different professions and states of life are conversant, being very different and habituating them to very different passions, naturally form in them very different characters and manners. We expect in each rank and profession, a degree of those manners, which, experience has taught us, belong to it. But as in each species of things, we are particularly pleased with the middle conformation, which, in every part and feature, agrees most exactly with the general standard which nature seems to have established for things of that kind; so in each rank, or if I may say so, in each species of men, we are particularly pleased, if they have neither too much, nor too little of the character, which usually accompanies their particular condition and situation. A man, we say, should look like his trade or profession; yet the pedantry of every profession is disagreeable. The different periods of life, have, for the same reason, different manners assigned to them. We expect in old age, that gravity and sedateness which its infirmities, its long experience, and its worn-out sensibility

seem to render both natural and respectable ; and we lay our account to find in youth that sensibility, that gaiety and sprightly vivacity which, experience teaches us to expect from the lively impressions that all interesting objects are apt to make upon the tender and unpractised senses of that early period of life. Each of those two ages, however, may easily have too much of these peculiarities which belong to it. The flirting levity of youth, and the immoveable insensibility of old age, are equally disagreeable. The young, according to the common saying, are most agreeable when in their behavior there is something of the manners of the old, and the old, when they retain something of the gaiety of the young. Either of them, however, may easily have too much of the manners of the other. The extreme coldness, and dull formality, which are pardoned in old age, make youth ridiculous. The levity, the carelessness, and the vanity, which are indulged in youth, render old age contemptible. The propriety of a person's behavior, depends not upon its suitability to any one circumstance of its situation, but to all the circumstances, which, when we bring his case home to ourselves, we feel, should naturally call upon his attention. If he

appear to be so much occupied by any one of them, as entirely to neglect the rest, we disapprove of his conduct, as something which we cannot entirely go along with, because not properly adjusted to all the circumstances of his situation.

These observations are sufficiently cogent to prove the absurdity of some notions which have been current of late, against the propriety of attending to the elegant arts in a system of education. The object of instruction is to make men better, not to embrate them. Whatever, therefore, is deemed auxiliary to such a disposition, should be encouraged. No evil can arise from an easy address, or from agreeable manners. Politeness, is the handmaid of civilization, perhaps, it may be shewn to be a constant attendant on virtue. Whatever means, therefore, are judged expedient to furnish the opportunity of exhibiting this amiable quality, are commendable and ought to be adopted. I allude in this instance to genuine politeness, not to that false affectation of good manners, which consists in foppery and a servile imitation of the servile manners of the great, and of men of honor, as, by a strange perversion of language, they are improperly

called. The term *great man*, is so equivocal, says Dr. Beattie, that I will have nothing to do with it. The vilest scoundrel on earth, if possessed of a crown or a title, immediately commences great man, when he has with impunity perpetrated any extraordinary act of wickedness; murdered fifty thousand men; robbed all the houses of half a dozen provinces, or dexterously plundered his own country to defray the expence of a ruinous war, contrived on purpose to satiate his avarice, or divert the public attention from his blunders and villainies. The term *honor* is of dubious import. According to the notions of these times, a man may sell his country, murder his friend, pick the pocket of his fellow-sharper, and employ his whole life in seducing others to vice and perdition, and yet be accounted a man of honor; provided he be accustomed to speak certain words, wear certain clothes, and haunt certain company. The pernicious influence of this unnatural law of honor, I have explained elsewhere. In the gay circles of levity and rank, where sympathy of sentiment is so congenial to each of their devotees, a peculiar language, a peculiar friendship, and a peculiar system of conduct, absurdly called the law of honor, regulate the standard of fashionable demeanor.

Of that law, if the observations made above be not deemed sufficiently conclusive, we may apply the just sentiments of Archdeacon Paley. "It is a law, says he, which being constituted by men occupied in the pursuit of pleasure, and for the mutual convenience of such men, will be found, as might be expected from the character and design of the lawmakers, to be, in most instances favourable to the licentious indulgence of the natural passions. Thus, it allows of fornication, adultery, drunkenness, prodigality, duelling, and revenge, in the extreme; and lays no stress upon the virtues opposite to these."

From these remarks, the candid reader will duly appreciate the value that is here placed on all ornamental or fashionable acquirements; and he will likewise discriminate between such as are useful to complete the character of a polite and virtuous man, and such as are appropriate only to idle ceremony, and to an ostentatious affectation of superior consequence and manners. Many writers, however, on subjects of education, have entirely rejected all ornamental acquisitions as destructive of the tender and flexible morality of youth. But, it will appear, from what has been said above,

that this conclusion has been too hastily drawn. They have, doubtless, meant well to the cause of virtue; but neither virtue nor reason will receive any injury from the possession and improvement of a good constitution of body, and an amiable temper of mind. Considered in this light and circumscribed only within this boundary, these pursuits cannot be too often recommended. We must therefore object to such deductions, which like many of the reasonings of mankind, are drawn from the abuse against the use of things.

If any additional supports were necessary to this argument, we might introduce the powerful authorities of Mr. Locke,^a and Dr. Watts^b, who have applauded this mode of instruction, when limited to such views. The latter was a man of singular piety, modesty, and uprightness; the former was as much distinguished for the elegance of his manners, as for his knowledge of the world, and his deep insight into the powers of the human mind. To these we may add the name of another character, who has considered bodily accomplishments as a component part of the happiness and perfection of man. He was a moral writer of a truly great philosophical genius; possessed of an exquisite

sensibility of heart; a talent for extensive and accurate observation, an irresistible eloquence, and a mode of thinking copious, nervous, and elegant, a man whose charms of composition will be studied by every man of taste in future ages, and whose philosophy will be read with advantage by every friend of liberty, virtue, and mankind. After what has been said of him, the reader need not be told that I mean Rousseau.

It has been judged proper to devote our attention to these interesting subjects, not for the sake of dispute, but for the correction of a prevalent error or prejudice. Presuming that this portion of instruction will not be denied, we shall have less occasion to interrupt in our progress, the simple narrative of a plan of education, whose object is knowledge and happiness, and the only means of obtaining them, the habit of industry, an inquisitive spirit, and the practice of virtue. If, therefore, in the sequel, we should avoid noticing these ornamental parts of learning, it is because we deem their utility admitted, and we would occupy the reader's time, with what solely appertains to the improvement of the mind.

As then, it is not an undertaking too arduous,

for a single individual, to accompany human society through all its progressions from rudeness to refinement ; and as all our complex ideas, are formed from those materials of knowledge with which we are furnished by the inlets of nature, and by those arbitrary combinations of things, which result from our commerce in life ; we ought, in the elementary studies of youth, to begin, where man first began in society. Hence, the earliest species of instruction must relate to self-knowledge, or the just comprehension of the nature and faculties of the mind. After this has been obtained, we should proceed to describe the progress of mind, in the invention of arts and sciences ; and excite in the pupil, new ideas, proportionate to the advancement of society in its different stages of improvement. The study of arts and sciences then arises in the natural order of things, and becomes familiar to the understanding, when the original of both is properly referred to the wants and meliorated condition of man. To make them easily comprehended, we must exhibit to the mind, in what manner, the state of the world, rendered their introduction indispensably necessary to its happiness. By following this plan of study, the powers of intellect will be found to unfold

themselves with ease and rapidity, and instruction being no longer inverted, every acquisition that is made in science, will lead to and facilitate the attainment of some other acquisition, in that regular order, which nature intended for the political and moral progress of nations as well as of individuals.

To this plan, it has been frequently objected, that children are not capable of attending to studies, which require reflection, and that it is more advantageous to postpone them until a particular age, called the age of reason; an epoch in human life which remains indeterminate. It is asserted, that in the life of man, there is a particular instant of time, in which, that reason, which he did not possess before, rushes upon him of a sudden. The cause of this prejudice, for it merits no other epithet, has been ably and unanswerably exposed by M. de Condillac. It will be proper, therefore, before we proceed, to analyze the processes useful or incidental to a perfect education, to present a statement of the arguments employed in the refutation of an opinion, which is both adverse to the progress of mind, and hostile to the improvement of nations.

In the first organization of societies, there existed neither arts nor sciences; the condition of man was but a small degree superior to that of the brute. The whole extent of human knowledge, was limited to a few unsettled and immethodical observations which necessity had originated, and the number of which was too small to have exacted the propriety of distributing them under distinct heads. But, when observations of every kind became multiplied, it was found expedient to arrange them in order, and they were accordingly divided into classes. An assemblage was made of all those observations which related to agriculture, another of those which belonged to astronomy, &c. To avoid confusion in those collections, the observations which had been made, were reduced to general principles. By this mean, every species of knowledge, was expressed in a summary method, and it was an easy matter to prosecute each, by descending from the highest to the lowest classes of generalization.

Those who in this manner, digested and reduced human knowledge, appeared to have created the sciences. Their method was convenient and proper for themselves, and for all those whom they supposed to be already in-

formed ; but it is evident that it set forth the sciences in an order contrary to that in which they had themselves acquired them ; for *they* never began with general principles, but with observations. Nevertheless, as this method was clear, and was even the most simple for those who had been in the habit of making observations, they thought that it must be the most proper for the purpose of instruction ; and they forgot that *they* were taught by a different method. Instead of leading children from observation to observation, as ignorant persons whom they would instruct, they began with them, as if they had been already well taught, and that nothing more remained to be done, than to dispose their knowledge in a systematic order. But when it was discovered that they could not comprehend any thing concerning general principles, because those principles implied observations, which they had not yet made ; it was said : *they are not able to acquire such portions of science, you must wait till they have reached the age of reason.* But there is no age in which the general principles of a science can be comprehended, if the observations that have led to these principles, have not been previously made. The age of reason, therefore, is that wherein men have made ob-

servations ; and consequently, reason will arrive apace, if we induce children to make those observations.

If we would know in what manner we should conduct ourselves towards them, the first precaution to be observed consists in the knowledge of our own conceptions, or in what manner we ourselves conceive the things which we have learnt. For this purpose it is necessary to decompose the human mind, that is, to observe the operations of the understanding, the habits of the mind, and the generation of ideas. As soon as this analysis is made, the plan of instruction is found ; at least we know where we should begin, and more than this is not necessary to be known. It will then appear that the true and only just method is to lead the pupil from things known, to things unknown ; that it suffices, therefore, to begin with what he already knows, in order to teach him any thing that he is not yet acquainted with, and that in making him resume occasionally each scientific subject, that has been submitted to his previous consideration, he may be enabled to proceed without difficulty to the achievement of some new science. He must however be particularly cautious not to pass

over any of the intermediate ideas. But this precaution will be unnecessary, when he is capable of supplying them by an habitual exercise of his mind. This plan is simple. It does not compel the preceptor to study the sciences in the systems which have been formed; on the contrary, he must forget all of them, seem to be as ignorant as his pupil, and proceed with him from observation to observation, as if they were making together the same discoveries. It is in this manner, that nations have become enlightened. Why then should we search after any other method to enlighten our children? But, it may be said, nations have enlightened themselves by slow degrees, and their infancy has endured for many ages; how then can a method which appears to have obstructed the progress of their minds, be employed in an education which ought to close in a few years? To this I answer, that nature indicated to the first men the sole method of discoveries, since it has placed them in a situation that rendered it necessary for them to observe; and that if they have made at first only a tardy progress, it is not because this method is slow in itself, but because the instrument with which they observed, was not sufficiently known to them. They would have made use

of their minds with the same facility as they exercised their hands, if from the earliest ages they had known the faculties of their understandings, as well as they understood the faculties of their bodies. Capable of regulating all the operations of thought, they would have soon learnt to have supplied it with new powers. They would have discovered methods, as they have discovered levers, and we should have remarked in them, a rapid advancement, every time that they felt the necessity of employing the powers of their minds, in the same manner as they felt the necessity of employing the powers of their bodies.

The progress of human sciences therefore has been retarded solely because men have neither been sufficiently acquainted with the capacity of their minds, nor have felt with sufficient force the necessity of exercising them. Consequently, if in a system of education, we would make use of the only method to which we are indebted for all that we have hitherto acquired, we must at first enable a child to comprehend the faculties of his mind, and make him sensible of the necessity of exerting them. If we succeed in both, every successive undertaking will become easy; for, instead of imagining as many

principles and methods as are distinguished in the arts and sciences, we should have nothing more to do than to observe with him. This is not a plan of very difficult operation. For if the faculties of the understanding be the same in a child as in a man, why should he be deemed incapable of observing them? It is true, that they have been exercised on a less number of objects; but at least it must be granted, that they *have* been exercised, and often with success. Why then can he not be made to notice what passes within himself, when he has already formed judgments and reasonings, when he has had desires, and contracted habits? Why can we not induce him to remark the occasions in which he has rightly managed them, or those in which they have been mismanaged, and instruct him, from his own experience, to manage them in future more advantageously? When he has made these primary observations, he will exercise his faculties with better judgment; and henceforward he will be more desirous to employ them, until by frequent essays the habit of exercising them will be insensibly acquired. From the moment that a child begins to comprehend the use that is to be derived from the employment of the faculties of his mind, he will require nothing further than

a proper direction to enable him to seize the thread of the sciences, to follow them in their progress from first to last, and to learn in a few years what has cost mankind a long revolution of ages to acquire. It will suffice that he make observations, when he is capable; and when he cannot observe by his own exertions, it will be enough to give the history of observations which have been made. This method possesses besides many advantages. It removes from our studies a multitude of superfluous objects which detain without instructing us in our progress; and rejects those empty sciences which consist principally in words or vague notions, and which are called *primary* or *elementary sciences*, as if it were necessary to lose time in learning nothing, in order to prepare ourselves for studying one day or other to some advantage. It averts those disgusts which a child cannot avoid experiencing, when in the commencement of his studies obstacles are opposed to him which he cannot surmount, and doomed to store his memory with words that he does not understand, he is punished for not retaining what he never comprehended, or for not having learnt what he never felt the necessity of learning. On the contrary, it enlightens with facility, because from the first

lesson it leads him from what he knows to what he was ignorant of ; it excites his curiosity, as he judges from the knowledge he has already gained, of the facility of obtaining more ; and his vanity, flattered by his first progress, renders him anxious still to acquire. It instructs him almost without any exertion on his part, because instead of making a parade of principles, it reduces the sciences to the history of observations, of experiments and discoveries. And lastly, as it never varies, and as it is the same in each study, it becomes more familiar to him every day : the more he becomes informed, the more facility he acquires in informing himself ; and if the period of his education has been too short, he may, alone and without assistance, acquire every sort of knowledge that has not been submitted to him before.

It must be granted that the education which cultivates memory only may perform prodigies, and has performed them ; but these prodigies last only during the time of infancy. Besides, this method is not most successful with children who are born with bright geniuses. They have on the contrary, a natural aversion from studies in which reflection has no share, and the

memory is filled with words only. In this mode they display scarcely any talents; and if they are afterwards distinguished in the world, it is to be ascribed to their having recommenced their own education. But how many useless things have they to forget! how many prejudices to destroy! how many false ideas to correct! what labor to disengage themselves from the shackles in which the faculties of their minds have been confined! and what obstacles to the expansion, and to the progress of their reason! It is not meant by this, that the memory should be neglected: but if that education which is confined to the exclusive cultivation of it, is so much the worse, inasmuch as it cultivates only this faculty; that which appears to neglect it, will exercise it sufficiently, even if it occupied itself with reflection only. He who has reflected much, has retained much; if any thing escape him, he can recover it, as the reflections which are become familiar to him are linked all together, and can always bring back the mind to those points where it has already conducted it. He, on the contrary, who knows only by rote, knows nothing; and what he has forgotten, he never finds again, or at least he cannot be certain of retracing it. It is the work of

reflection therefore, to prepare the materials of our knowledge, to arrange them in order in the memory, to regulate all the proportions ; and he who has not learnt to reflect, is either uninformed or badly informed, which is still worse. Notwithstanding the generality of persons are full of admiration when a child recites long extracts from history without understanding them, or when he speaks several languages without comprehending a syllable of what he said in any one of them. Every one will confess that this does not constitute knowledge ; it is, however, thought that infancy is not capable of any other studies. It is therefore concluded, that in order to avoid losing such precious time, we must hasten to cram the memory in any mode whatever ; and we flatter ourselves that *something* will be always preserved in it, because *words* will be always preserved : as if ideas would not be treasured up with more certainty, and as if there are no ideas within the capacity of the mind adapted to every age.

It may now perhaps be asked, how much time we should allot for the education of a child ? To this I answer, that if we are bound not to neglect his instruction, neither should

we suppose that he can become learned in every part of science to which he may devote his attention ; because this would be both chimerical and prejudicial to his future progress. As his tender age incapacitates him from making that continued application which is essentially necessary to the study of the sciences in their more abstruse particulars, it will answer every purpose if his first steps be rendered safe, and his way cleared by the removal of all the difficulties. His education will be completed when he has made himself master of those substantial elements of things, which his relative situation in the world require him to understand. If he possess talents (and they are to be acquired) his progress will be afterwards rapid, and without assistance. Nor is it necessary that he should be in possession of all the knowledge, which may be useful hereafter ; it is enough that he be furnished with the means of obtaining it ; neither is it of any material consequence whether he have exercised his mind on any subject until he has thoroughly investigated it, nor on several subjects without being perfectly acquainted with any one of them. It is sufficient that his mind is exercised, that the employment amuses him, and that he always has just ideas. In a word, our object

is to teach him to think ; and that we may be competent to afford him proper lessons on the subject of thought, we should understand in what manner we ourselves think.

The mind thinks either by habit or by reflection ; by habit, when it judges according to a certain mode which is become familiar to it, and its judgments are so prompt, that it is incapable of remarking at the time, all the motives which determine it, and all the ideas which present themselves before it. By this mode for instance we judge at first sight of the beauty of a picture. The mind thinks by reflection whenever it observes objects that are new to it ; and then it regulates the operations of its understanding with such deliberation and slowness that it obtains time sufficient to remark successively the ideas and judgments which it forms. In this manner, we study the arts and sciences. The instant that a painter is struck at the sight of a picture, he has not yet separated all the judgments which determine his admiration, because they present themselves to him at once, and he cannot distinguish them until he has considered them separately and successively. There is consequently this difference in judging by habit and by reflection ;

in the first case, our judgments are not distinguished, because they are formed altogether, and in the second, they are distinguished, because they follow each other in succession. Our judgments by habit serve as principles to all the habits of the body. When I get out of the way of a stone that is aimed at me, I judge from its direction of the injury it would occasion if it struck me, and of the motion I ought to make in order to avoid it. All these judgments are formed within myself, and if I do not notice them, it is owing to their being all made at the same moment. These habits are immediate helps to us, and may be said to preside over our preservation. Reflection, it is obvious, would be too tardy to afford such assistances.

Our inability to recal the time when we were without those habits, prevents us from being sensible of the necessity of our having formed comparisons, judgments and reasonings in their acquisition. But we should judge of them by those which we remember having acquired, and which have exacted from us a considerable degree of application. Such for example is the habit of reading. In the habits which the mind contracts, our ideas are joined

together two ways. If they associate to present themselves always to us altogether at the same instant, we find a difficulty in observing them one after another. If on the contrary, they be united to form a series, we perceive them succeed each other, and a single one suffices to recal many in succession. When these associations become familiar, they are habits to which thought is subservient, without causing us any effort of reflection. From this it is apparent, that the association of ideas is the principle of memory: it is the sole resort of thought, and impels it with a swiftness that excites our astonishment. By it the imagination makes readily a number of combinations.

As the body appears to move by instinct when it obeys its movements of habit, so the mind appears to think by inspiration when it is obedient to its association of ideas. Both are indebted to their habits for all the graces and all the talents of which they are susceptible. Our taste in this manner is formed from the habits which we have contracted. It is only the result of many ideas that we have joined together; and these associations retain models in our minds which we no longer

examine, and after which we judge rapidly of the beautiful.

But altho' habits be acquired by a series of comparisons and judgments, it does not follow that we have always sufficiently reflected before we have contracted them. The ease with which we acquire them will not admit of it, and this is the reason of their being good and bad. If they constitute the principle of all the graces and talents, they are likewise the cause of all our defects, and of all our errors. Locke has remarked that madness proceeds entirely from some association of ideas, that is, from some false judgments, on which we have formed a habit of judging. A corrupt taste and a weak mind are derived from similar associations.

After these considerations, our object should be to inculcate good habits into the mind of the pupil, and therefore to give him ideas of many kinds, to accustom him to combine them, and to guard him from false associations. If we would know where we should begin? we should consider at what point the best informed nations have commenced. We shall there perceive in the origin of societies some laws (or customs

which served as such) some rude arts, some astronomical knowledge, and a commencement of agriculture and of commerce. A slow progress was made in each, because men were but little enlightened in respect to their wants, and being content with the first means of satisfaction which presented themselves, they were less sensible of the necessity of observing, and therefore left all new discoveries to the wide empire of chance. The primary knowledge of nations, emerging from ignorance, is certainly within the reach of the capacity of a child, who has learnt to reflect on himself. As he has already observed the expansion of his faculties, and the generation of his ideas; he can observe with much greater ease the condition of societies in their outset and early progress. In this study he will acquire a multitude of notices which are dependent on each other. The associations will be found already made, and his mind may without exertion, habituate itself to pass and repass rapidly over the whole series of ideas which he may have acquired. If on the one hand, he be taught to comprehend in what manner observations have led to discoveries; on the other, he should be made to remark that in neglecting them, in making them badly, or in judging with too much haste, men have fallen

into error; and that we have become enlightened in proportion as we have observed rightly, and without precipitation.

Mankind are rarely deceived in the means of satisfying their most pressing wants. If they had judged, either before they had made sufficient observations, or after having made them improperly, experience would soon have corrected their mistakes. But it was not the same in speculative matters. When they had judged wrong, experience did not enlighten them, or it enlightened them with difficulty, and they would remain in their errors for ages. By these observations on the original of societies, we may excite the pupil to remark that there are studies in which it is very easy to acquire perfect knowledge, and others where it is extremely difficult to avoid error. And it is as curious as useful to observe the associations of ideas, which, giving to nations different modes of thinking, different customs and manners, advance or retard the progress of human knowledge, and transmit sometimes, to the remotest ages the remnants of early barbarism.

A prejudice common to all men during infancy, is to believe that things have been always

such as they found them at their entrance into the world ; it seems we are disposed to believe that they never had an origin. In the same manner, Eugenius thought that manners, customs, and opinions, had always been invariable ; and he did not imagine that the arts ever had a beginning. But the more he was prepossessed with the idea that things had always remained in the same condition as that in which he saw them, the more he was desirous to know what they had been in their origin and progress. He employed himself on this subject when he studied with his tutor, and also in the hours of recreation and leisure ; amusing himself with imitating the industry of the primitive men, and in representing the rising arts amid the sports of his infancy.

Nations made inquiries because they felt the necessity of instructing themselves ; and the sciences being limited at first to a small number, because men had but few wants, became afterwards multiplied in proportion as new wants occasioned new studies. The time was therefore to arrive, when societies confident of the means of their subsistence, were to search after those things which could contribute to the conveniences and ornaments of life. This was the

period at which the fine arts appeared, and taste made its appearance with them; and it became perfected, because men reasoned on its objects, in the same manner as they had reasoned on things of the first necessity. In proportion as men thought themselves more capable of reasoning, they applied it to new studies. By degrees they reasoned on every thing; the mind always thirsting after fresh knowledge, devoted itself to researches of pure speculation, and the world produced philosophers as it had furnished poets. Such then is the course of studies in which nations have been engaged by their wants; they began with observations on things of the first necessity; they afterwards explored the regions of taste, and they ended with reasoning on speculative matters. The history therefore, of the human mind, discovers to us the course which we should adopt in the instruction of a child. After having made him reflect on the rise of nations, our first care should be to form his taste, and to reserve to a future period, the investigations of philosophy. The same history of the human mind points out what method we should pursue in the prosecution of these studies. The arts and sciences had not been formed when nations began to

enlighten themselves. A child therefore should inform himself without knowing whether arts and sciences be in existence. He must repeat what nations have done; that is, generalize his ideas as fast as he acquires them. When he shall perceive general principles, and general rules arise from the multitude of ideas which will accumulate in his mind, and from the number of relations which he will discover between them; we should make him remark, that these principles and rules which were before useless to his instruction, are now become necessary in order to arrange his knowledge methodically. By instructing him in this manner, he will make without assistance different distributions of the things which he has learnt, and he will appear in his turn to have created the arts and sciences. Investigations on the art of speaking were not made until men were enabled to observe the turns of language that custom authorized; and these were not observed until great writers had enriched the languages. There were poets and orators before men ever thought of making grammars, of composing treatises on poetry and systems of rhetoric. It would therefore be useless, and even unreasonable to teach these arts to a child, who has not yet learnt by common use, the proper idioms.

of his vernacular tongue, and who being incapable of distinguishing what is beautiful, is certainly incapable of judging if it be determined by any rules. Hence, in order to form the taste of the pupil, we must exhibit before him the best models of the beautiful, and above all endeavour to render them familiar to him. He should read over and over again the best writers. The dramatic poets are the most proper. If every people have entertained notions of poetry, it is not probable that a child will be insensible to its charms. He will be highly gratified in the perusal of the poets; and will learn his native language less apparently by means of study than by way of amusement. While, therefore, he made himself well acquainted with the best writers, Eugenius took notice of what he had met with in the course of his reading, and those observations naturally led him to the discovery of the rules of the art of speaking. In order to assist his studies on this subject, he read the *Grammar* of M. de Condillac, and afterwards, the *Treatise on the Art of Writing*, by the same Author. In the composition of these works, the author's design is not so much to inform a pupil on the nature of his own language, as to make him reflect on what he previously knew. They unfold in a more distinct

and enlarged manner, the observations which the pupil has made in his reading, and thereby strengthen his habit of judging of the beauties of style. His taste being formed in a great measure, by these means; it was proper to give him some philosophical information. As he had been already employed in making observations on the faculties of his mind, on the origin of societies, and on language, there could be no doubt of his being capable of observing with philosophers, and of following them in their discoveries. For if a mind that has been habituated to reflection can be led from one truth to another, it is not easily to be conceived that any portion of knowledge is beyond its reach. Engenius, therefore, applied himself to Condillac's Art of Reasoning, the object of which is to place before the eyes of a child, a portion of the discoveries of philosophy. This work, unlike to many systems of logic, does not include methods of teaching the rules of reasoning, by reasoning on nothing at all, because it is of no use whatever to reason when we are not desirous of making discoveries, nor of perfecting ourselves in the discoveries of others. The art of reasoning is in fact, simply the art of observing and of judging right. Engenius already understood this

art, it was therefore of no consequence to teach him the rules, but to teach him to apply them to new objects. And further, he knew in what manner to reason before he received any instructions from his tutor, for it must be confessed if he had not known how to form a judgment, he would not have been in the least benefited by his tutor's assistance. The design of the latter was to employ him in studies which he would not have attempted singly, and Eugenius studied in company with him, in the same manner as when he studied well by himself.

The art of reasoning therefore does not teach new rules; we are indebted to it for the rise of arts and sciences, but mankind have not always known in what mode it should be employed. Those philosophers who reasoned justly on matters of taste, have been whole ages in learning to reason on the objects of their inquiries, so that the art of applying our reason to philosophy, is an entire new art.

Although we begin to know somewhat of the art of thinking, when we first make use of our senses, yet this art cannot be understood in all its extent, until the three former have been

brought to perfection. It is only the conclusive exemplification of the observations which have been made in their study. This exemplification is given in the sequel of the work on the Art of Reasoning, by M. de Condillac, and is entitled Logic. Finally, the art of speaking, the art of writing, the art of reasoning, and the art of thinking, constitute in reality but one and the same art. For when we know how to think, we know also how to reason; and nothing further remains in order to speak and to write well, than to speak as we think, and to write as we speak.

If we consider, besides, how confined our knowledge would be without the use of signs, we shall find that if we had fewer words, we should have fewer ideas, and consequently we should be less capable of thinking and of reasoning. The art of speaking therefore is only the art of thinking, and the art of reasoning, which expand in proportion as languages become more perfect; and it becomes the art of writing, when it possesses all the exactitude and precision of which it is susceptible. But, although in fact, all these arts may be resolved into one, and it be useful to consider them in this point of view, in order to bring them back

to the same principles; it is nevertheless necessary that they should be treated separately, when we would trace the expansion of our faculties and the progress of our knowledge.

It has been already stated that all these arts may be reduced to one; and we may further advance that they may be all reduced to the art of speaking. I should not be able to express any judgment with words, if from the moment that I am about to pronounce the first syllable, I did not see already all the ideas of which my judgment is formed. If they did not all present themselves at the same instant, I should not know where to begin, as I should not know what I meant to say. It is the same when I reason; I should neither begin nor end a reasoning, if the series of judgments of which it is composed, were not at the same time before my mind. It is not in speaking then that I judge and reason; I have already judged and reasoned, and these operations of the mind necessarily precede our discourse. We learn to speak, because we learn to express our ideas by signs, and the relations that we perceive between them. A child would not learn to speak, unless he possessed ideas, and perceived their relations; he judges and reasons there-

fore, before he understands a word of any language. Of this his conduct is a proof, since he acts in consequence of the judgments he has made. But as his thought is an instantaneous operation and without succession, and as he is unacquainted with the means of decomposing it, he thinks without knowing what he does in thinking, and *to think* is not yet become an art to him. If a thought be without succession in the mind, it has a succession in discourse, where it decomposes itself into as many parts as it includes ideas. We can then observe what we are about when we think, we can give an account of it, and therefore learn to manage our reflection. To think becomes then an art, which is the art of speaking. To be convinced of this, it will suffice if we consider, that the art of decomposing our thoughts, by means of a series of signs which represent its parts successively, is an analysis which like all analytic methods, leads the mind from one discovery to another, or from one thought to another. For as much as the faculty of thinking is limited in a person who does not analyze his thoughts, and who in consequence, does not observe all that he does when thinking; so this faculty ought to enlarge itself in one who

analyzes his thoughts, and who observes even its most minute details.

A child who has not yet learnt to speak, is greatly confined in this respect; but in learning to express his judgments with words, he learns to analyze them, because he learns to observe them separately. He then knows what he is about when he judges, and he becomes more capable of judging. The art of thinking, is therefore to him, the art of speaking, and to this he will be indebted for the enlargement of his faculties and the progress of his knowledge. On this account, the art of speaking is to be considered as an analytic method, which leads us from one idea to another, from judgment to judgment and from one sort of knowledge to another. We should be ignorant of its first benefit, if we were to regard it solely as a mean of communicating our thoughts,

Languages are more or less perfect in proportion as they are more or less fitted to analysis; and the more easy they render it, the greater assistance they afford to the mind. Indeed, we judge and reason with words, as we calculate with cyphers; and languages are to nations what algebra is to geometricians.

In short, languages are only methods, and methods are only languages. Consequently, if geometricians have made a progress in proportion only as they have perfected their methods, the mind of a people will never make any considerable progress until their language has been brought to perfection ; and as defective methods obstruct the art of calculation, so a defective language imposes limits on the art of thinking. A nation does not possess throughout every period of its history the same taste, intelligence, and extent of mind, for the same reason that geometricians of every age have not been capable of resolving the same problems. From this it is obvious, that the art of writing, the art of reasoning, and the art of thinking, are reduced to the art of speaking, in the same manner as the whole of geometry is to be resolved into the art of calculating methodically.

Since all these studies are in fact but one and the same art, it is evident that they tend to familiarize the mind with the same ideas, and to give it the same habits. None of them divert the attention of the mind from another, but they all concur mutually to promote the same object, that is, to teach it to think.

If we expect grandeur and magnificence in costly mansions, we must content ourselves to find the conveniences of life in our houses, and when we build for the sake of shelter only, we must erect cottages. This is a representation of the difference which occurs in the education of citizens. As they cannot all contribute in the same manner to the benefit of society, it is obvious that instruction must vary, according to the condition which they are destined to exhibit in life. It is sufficient that the lower orders of society are taught to provide for their wants, their comforts, and to know their rights and duties; but science becomes necessary in proportion to the superior condition of men. The difficulty consists in preparing the mind with the elements of knowledge, as it is sometimes difficult to fix on the spot on which we would construct our buildings. There are ungrateful situations, and certain soils on which we cannot lay foundations without great trouble and expence; we may even be deceived, and the building may fall to pieces. Nevertheless, those who are destined for superior stations in life, should exalt themselves in the midst of the people, like a palace in the midst of the plains whose ornament it constitutes.

All the studies which have been hitherto examined are limited to the art of speaking, considered as the art which teaches us to think. They form the mind, and dispose it to a further progression in science. It is proper therefore that the study of history should succeed them.

History should be considered as a collection of observations, which affords to citizens of every denomination, truths of the greatest importance to their welfare. If we make a proper application of our acquirements, and convert them to our use, it is because we are enlightened by the experience of ages past; it is therefore of no consequence to collect together all the facts, and to fill the memory with them; but to select with judgment such as are beneficial. If we would learn the art of government, we should inform ourselves in the school of observation, and remark the good or evil actions of those who have governed. Their virtues should be revered, and their talents cherished, while we deplore their faults, and detest their vices. In a word, history is to man a course of morality and legislation; comprehending whatever contributes to the happiness or misery of nations; that is to say, governments, manners,

opinions, abuses, arts, sciences, revolutions, their causes, the progress of grandeur, and the decline of empires, considered in its principle, its acceleration and its final term. It comprizes whatever has contributed to form, to perfect, to defend, to corrupt, and to destroy civil establishments.

Such is the mode in which history should be investigated. When it is necessary to know facts, merely for the sake of being able to pursue the thread of events, it will suffice to indicate them; but when they are the germs from which revolutions that burst forth afterwards are prepared, they should be developed with all the circumstances which are transmitted to us. In order to treat history in this manner, we should divide it into a number of periods longer or shorter, and each of which terminates in a revolution. By this mean, each portion of history is one and complete. The last term to which every thing relates, fixes our choice of facts, and we should prepare the detail of a whole period, by an exposition before we enter upon it. A glance, sufficient to make known the actors and the place of the scene, is a necessary preliminary, and ought always to be given. For, as we should make it a rule to in-

form the pupil where we are about to lead him, and how we lead him, we should give him notice, at every principal epoch, of the object that we have in view.

By this it is evident, that the pupil will engage in the study of history with a well informed understanding. He will have comprehended the faculties of his mind; observed societies in their origin; his taste will have been formed by reading, and the discoveries of philosophers will have completed the expansion of his reason. If grammar, the art of writing, the art of reasoning, and the art of thinking diversify his studies, he will find, again in all of them, the same method, and the same principles; as all these arts are reducible to one. He will become familiar with the knowledge he has already obtained, and it will be easy for him to acquire more.

Such are the solid reasonings employed to refute a prejudice concerning education that has greatly retarded the improvement of mind, and the felicity of nations. The preceding observations contain also the outlines of a more liberal plan, which promises greater advantages inasmuch as it conforms to the order of nature, in

the progress of societies from barbarism and ignorance, to knowledge and civilization. And when we consider that the groundwork of civil science which is here proposed, however abstruse it may appear to some persons, however repugnant to the usual practice of instruction, and to received prejudices, is not only the safest, but eventually the easiest mode of education, and that it has been tried with unparalleled success, I think there can be no doubt of the propriety of making it general.

That the present mode is defective every thinking man will admit. We are no sooner able to spell our mother tongue, than we are compelled to abandon it, and to sacrifice several of the most precious years of youth in the laborious pursuit of a dead language.

In this syllabus of education, it is proposed to assist the human mind in unfolding its powers in that order which nature and experience authorize. A child is led from absolute ignorance to knowledge, and from one species of knowledge to another in a regular connected chain of acquirements, until he has attained all the elements which his future destination in life requires. To instruct him further than in the

elements of knowledge is not the province of education. All that it can and will perform is to furnish him with such assistances, that whatever department of science he may afterwards select for his future occupation, he may be enabled to undertake it without the aid of a preceptor. Men are not intended to be in leading strings all the days of their lives. The time will arrive, when disengaged from the advice of the tutor, and the admonitions of the parent, a youth must plunge into the bustle of the world, and confide entirely to the principles which he has imbibed during the term of his education. Then it will soon appear, whether the plans of his education have been well chosen, and whether his future progress will do credit to the care that has been exhausted upon him during his infancy.

When we consider that all our future hopes respecting a child, rest solely on early care, and that the man will be exactly what the child was in miniature, we shall never regret any labor or expence that we may devote to his instruction. When a young man quits the house of his father, he is instantaneously environed with a multitude of dangers and fascinating attractions. He ought therefore to be duly

fortified, not only against vice and seduction, but against flattery which generally precedes them. He ought likewise to be so elegantly prepared for the great world, that he may reckon with safety on his own probity and qualifications, when an emergency arises to call them into action. In vain will a youth perplexed with difficulties in the world, invoke the learning of Greece and Rome, if he be ignorant of the constitution of our nature, the modes of thinking which prevail, and the nice shades and distinctions that exist between right and wrong. He should understand well the constitution, laws, and genius civil and military of his native country, and he should not be imperfectly acquainted with the civil polity of surrounding nations. The Latin and Greek languages, considered as models of taste and fine writing, are useful to form the style, and sharpen the wit of men. But a coryphæus in ancient learning is but a mere pedant, if he be ignorant of the nature, beauties, and power of his mother tongue. His learning, which would otherwise be an useful ornament to his more practical knowledge, cannot but impede his progress in the world. An Englishman destined to reside in his native country, is to think, write, and speak in English, not in

Latin or Greek; and the greatest cause that has hitherto obstructed the refinement of English literature, is the total neglect of our own language, during our education. We cannot therefore be surprized when we find scholars, express themselves awkwardly in it, or when we discover that the French, Italian, Latin, and Greek tongues, are better understood (because they are more attended to) than our own. Our acquaintance with the authors of antiquity should have taught us better plans. For according to the undoubted testimonies of Quintilian and Cicero, the greatest pains were taken to instruct the Roman youth in the Latin tongue, before they were taught the Greek, which was as foreign to them as French, Latin, or Greek are to the English. Were the Roman Republic in existence, and were it judged proper that its youth should be conversant in the language of our country, we should find that it would not be attempted until they had been thoroughly acquainted with the general principles of Latin. The same observation will apply to us. Let the divine languages of antiquity, be cultivated as a part of education, but let them not absorb the whole; let them assist the style, but never exclude the bold and simple energy of the British language. To

animate, to rouse, to move, to inform the hearts and minds of men, is at this time, the peculiar province of our mother tongue. All our reflections and passions are now summoned into action, and if the great hold conversation with the immortals only of Greece and Rome, they will soon perceive themselves outdone in the race of eloquence, by the lofty and manly style of the unlearned part of the community. Great concussions of empires frequently produce an ardor of sentiment, and a peculiar strength of language. The day is past, when a citation from Aristotle, Plato, or even Tully, would silence the voice of contending factions. **MAN AND FOR EVER**, is the motto displayed on the banner of humanity, which is unfurled at the close of the eighteenth century, and the examples of antiquity, however eloquent, are not permitted to be quoted in derogation of the great principles of liberty and justice. The language in which Milton, Shakspeare, and Locke wrote, was the language our forefathers used, when they conquered their liberties, and wrested the iron sceptre from the hands of tyrants. It is in this language we should struggle to maintain them; and such a struggle, if necessary, the circumstances of the times, and the genius of the age, will stamp with glory, and with success.

CHAP. III.

*The same subject continued.---On the study of the
Latin and Greek languages.*

Ante omnia ne sit vitiosus sermo nutricibus.---Has primum audiet
puer, harum verba effingere imitando conabitur.---Non assuescat
ergo, ne dum infans quidem est, sermoni qui dedicendus est.---
QUINTIL. lib. 1. cap. 1.

Multa lingue vitia, nisi primis eximantur annis, incommendabili in pos-
terum pravitate durantur.---Ibid. cap. 2.

Illud magna cum perseverantia custodiebant, ne Græcis unquam, nisi
Latine, responsa darent.---Quo scilicet Latine vocis honos per
omnes gentes venerabilior diffunderetur. Nec illis deerant studia
doctrinæ: sed nulla non in re pallium togæ subjici debere arbi-
trabantur: indignum esse existimantes, illecebris et suavitatē li-
terarum imperii pondus et auctoritatem domari.---VAL. MAX.
lib. 2. cap. 2.

IT was asserted in the preceding chapter,
that we might derive benefit in the education
of our youth, from the example of those very
Romans, whose language we are daily compel-
ling them to study in exclusion of their own.
This proposition requires no other proof than
the evidence of the Romans themselves; as

the citations which are at the head of this chapter, sufficiently demonstrate.

If we may rely on the authority of Quintilian (which is not disputed on the subject of education) the Romans habituated their children to a purity of speech from their cradle, and for this purpose no small pains were spared to provide them with proper nurses, servants, and preceptors.

It were well if we took the same care to perfect ourselves in the English tongue. There are comparatively but a few persons who understand it by rule. To speak it, is deemed sufficient to make us excel in it; and therefore we cannot be surprized that we seldom meet with any one who has studied its genius and delicacies. Even men of the greatest abilities are very often ignorant of its most common rudiments. This is a lamentable defect that education alone can remedy; and the earlier we apply ourselves to it, the easier will our progress be in the attainment of the Latin and Greek, and the more leisure we shall obtain for the pursuit of all the branches of science, during the time of our attention to those elegant languages.

To this early application to our own tongue, it has been often objected, that the Romans had made no progress in literature and eloquence, until their youth applied themselves to the study of the Greek. To this I reply, that admitting the propriety of the observation, the case does not apply to us, and if it do, if the Greek possess the talismanic efficacy of regulating the taste, we, as well as the Romans, should apply ourselves first to the study of the Greek language. Besides, until the Romans became acquainted with the Grecians, they were little better than turbulent barbarians. There existed causes political as well as literary of that attention which was paid to the Grecian language; the same policy which urges our youth to the study of French, urged the Romans to the study of Greek, and the rude deficiencies of the Roman language gave occasion to cultivate the beauties of Greek in order to remove them. The Romans also, became masters of the Grecian works of art, before they attempted the Grecian science and language.

It was not until Rome had reached her maturity, or as Florus expresses it, *ad quandam juventutis florem pervenerit*, that her citizens made

any considerable improvements in their native language. Before that period, according to Horace and Tully, they made but slow advances in taste, poetry, and eloquence, for their minds were too much occupied with arms and conquest. But, about thirty years after their first intercourse with Greece, philosophy and rhetoric made their appearance among them. Above one thousand of the principal members of the chief cities in Greece, were removed from their own country, and dispersed throughout the various regions of Italy. Among these was the celebrated Polybius of Megalopolis, whose talents and learning not only obtained him the friendship of Scipio *Æmilianus*, and of *Lælius*, the most illustrious Romans of that age, but enabled him finally to procure the release of all his countrymen. Those unfortunate exiles had brought away with them a great share of the politeness and refined arts of their native country, and having been reduced to a state of life, which divested them of every opportunity of public action, they devoted themselves wholly to the pursuit of letters, as well to divert the sad reflections of their banishment, as to improve and cultivate their minds.

In a few years the influence of their example and instructions had wrought so powerfully on the minds of the Roman youth, that the Senate dreading the relaxation of the ancient discipline, and the corruption of manners, decreed, on a report of the Prætor Marcus Pomponius, that neither philosophers nor rhetoricians should be suffered to reside in Rome. But this proscription, like all others whose object is to depress the dissemination of knowledge, only increased the general ardor. Accordingly, about sixteen years after, the passion for learning broke out with greater force; and to this epoch we may fix the rise of good taste among the Romans, who began to be ashamed of the approbation they had given to the coarse productions of Ennius and Pacuvius, and of the too great patience with which they had heard the wretched jokes of Plautus.

In consequence of the severe judgment of the Sicyonians against the people of Athens, for the plunder of Oropus, three commissioners were deputed from Athens to the Roman Senate, in order to procure a mitigation of the sum in which they had been fined. These were Carneades the academic, Diogenes the stoic, and Critolaus the peripatetic. The

eloquence of the first was violent and rapid, of the second neat and smooth, and that of the third was modest and sober. Their talents and eloquence excited universal admiration, and the brazen sons of Rome welcomed the approach of Grecian literature. Every other pleasure and exercise were suspended, and study became the predominant passion. Cato the Censor, apprehensive that the martial dispositions of the people would be enervated by study, and that they would abandon the glory of arms and action, for the honor of knowledge and eloquence, advised the senate to dispatch the ambassadors, that they might declaim in their own schools to Grecian children, and that the Roman youth, might be obedient, as formerly, to their own laws and governors,

But, the anathemas of Cato, were as unpropitious to the cause of ignorance, as the thunders of the Vatican, or the terrors of the Inquisition in later ages. A taste for learning was suddenly formed among the Romans, which no severity of discipline could annihilate, and experience soon proved that an empire is never so great and flourishing, as when it is encircled by the arts and sciences. The rigid Censor himself lived to be a monument of the

fallacy of his former opinions; for in his old age he studied Greek, which as Lord Verulam observes, was a judgment upon him, for his former blasphemies.

Notwithstanding the dismissal of the Athenian ambassadors, the Roman youth became daily more enamoured of study, and exhibited as much industry and attention in the pursuit of knowledge as they had ever done in the midst of arms.

It was about this time, that Terence introduced new delicacies into the Roman language, which had till then remained barbarous and unpolished. His success was so great in the comedies which he copied after the Greek poet Menander, that they were said to be compositions worthy of Scipio and Lælius.

In the interval from this period to the age of Augustus, the genius of the Romans matured by their attentive application to the Greek tongue, and enabled them to produce that rich harvest of excellent writings in every kind, which have attracted the admiration of succeeding ages, and which will ennoble their literary repute to all posterity. Greece was

then the usual school of the greatest geniuses of Rome, who strove to arrive at perfection in arts. Though Cicero had gained universal applause by his first orations, he found that something was still wanting to complete his eloquence; and although already a famous orator at Rome, he was not ashamed to become again the disciple of the Grecian rhetoricians and philosophers, under whom he had studied in his youth. Athens, which till then had been looked upon as the seat of science, and the capital of the whole for eloquence, saw at the same time with grief and admiration, that this young Roman was going by a new kind of conquest, to ravish from it the remains of its ancient glory, and to enrich Italy with the spoils of Greece.

During the usurpation of Augustus, the Roman literature was in its meridian, and all the delicate fruits, which had been transplanted from Greece, were in full blossom. But the majesty of eloquence, the pomp of language, which shone out with so much lustre during the period which immediately preceded the termination of the Republic, expired in a great measure with Cicero. The reason is obvious; liberty had vanished, and with it vanished all

those animating sentiments, and lofty accents which contribute so nobly to its nurture and support.

From this sketch it is evident, that the Romans were many ages in perfecting their language, and that it never attained its full force until it had called in the aid of Grecian learning. Eloquence, poetry, history, and philosophy, were formed in Greece, and thither the Romans went in search of them. And so sensible were they of their inferiority to the Grecians in these sciences, that as late as the time of Virgil, the palm of honor is given to the latter.

Excudent alii spirantia mollius æra ;
 Credo equidem, vivos ducent de marmore vultus :
 Orabunt causas melius, cœlique meatus
 Describant radio, et surgentia sidera dicent :
 Tu regere imperio populos, Romanè, memento ;
 Hæ tibi erunt artes ; pacique imponere morem,
 Parcere subjèctis, et debellare superbos.

But, with all my reverence for the great names of antiquity, with all my passion for Roman, and especially for Grecian literature, I cannot but think that the circumstances which attended the introduction of the Greek into the system of Roman education, are by no means applica-

ble to the English nation. For, we are at this time in a condition of literature and especially of philosophy, which the Romans never attained. We have great poets, excellent historians, and even elegant orators; we possess therefore the power of enriching our language without resorting to the remains of antiquity for assistance. When the Romans invoked the aid of the Grecian muses, their language and manners were coarse and barbarous; now that the English have polished and beautified their language, they entirely exclude it from their schools, so that the youth of England are better able to criticise the writings of antiquity, than to speak or write in their native tongue.

Upon the revival of letters I grant, it was useful, even indispensable to every literary character, to write as well as to speak in the Latin tongue. Towards the beginning of the twelfth century, we discern the human mind conscious of powers which it did not formerly perceive, awoken from that lethargy in which it had been long sunk, and observe it turning with curiosity and attention towards new objects. But the learning of the middle age, introduced an absurd kind of vanity, and occa-

sioned the most extravagant waste of time. By the help of confused notions, unmeaning distinctions, barbarous terms, and a sophistical method of reasoning, men were prepared to advance and defend the most frivolous and absurd positions; both theological and philosophical disputations degenerated into a mere trial of skill; and the honest inquirer after truth was left without any certain guide. This corruption of manners and opinions was accompanied with barbarism of language. Little attention was now paid to the study of grammar or rhetoric; a vast mass of terms wholly unknown in the Augustan age, were introduced into the Latin tongue, to express the abstract notions of dialectics and metaphysics; and a verbose, puerile, and inelegant mode of writing generally prevailed. Those who professed to be acquainted with all arts, both liberal and mechanic, and to teach them in a short time, neglected the study of grammar; whence they were ignorant of the first art, without which it is vain that any one attempts to be master of the rest. Even the best writers of that period were not wholly freed from literary barbarism.

In such hands, science degenerated into a

barbarous jargon, and genius again sunk in the gloom of superstition. The logic of Aristotle became the universal science; and Europe for almost three centuries, produced no composition that can afford pleasure to a classical reader. At length genius roused from its lethargy. The invention of paper in the fourteenth century, and of printing in the fifteenth, disseminated in the sixteenth century the seeds of knowledge. Italy in the age of Leo X. led the way to taste, and genius, and arts. The minds of scholars which had been diverted from the arts of composition and the ornaments of language, for the barbarous and barren subtleties of scholastic divinity, began now to awaken, and Europe saw arise out of her womb, polite scholars, and able philosophers.

It is impossible to quit this most interesting subject, without recurring to the authority and pertinent observations of Dr. Robertson. The first literary efforts of the European nations, in the middle ages, says he, were extremely ill-directed. Among nations as well as individuals, the powers of imagination attain some degree of vigor before the intellectual faculties are much exercised in speculative or abstract disquisition. Men are poets before they are phi-

losophers. They feel with sensibility, and describe with force, when they have made but little progress in investigation or reasoning. The age of Homer and of Hesiod long preceded that of Thales or of Socrates. But, unhappily for literature, our ancestors deviating from this course which nature points out, plunged at once into the depths of abstruse and metaphysical inquiry. They had been converted to the Christian faith; soon after they settled in their new conquests. But they did not receive it pure. The presumption of men had added to the simple and instructive doctrines of Christianity the theories of a vain philosophy, that attempted to penetrate into mysteries, and to decide questions which the limited faculties of the human mind are unable to comprehend or to resolve. These over-curious speculations were incorporated with the system of religion, and came to be considered as the most essential part of it. As soon, then, as curiosity prompted men to inquire and to reason, these were the subjects which first presented themselves, and engaged their attention. The scholastic theology, with its infinite train of bold disquisitions, and subtle distinctions concerning points which are not the object of human reason, was the first production of the

spirit of inquiry, after it began to resume some degree of activity and vigor in Europe. It was not, however, this circumstance alone that gave such a wrong turn to the minds of men, when they began again to exercise talents which they had so long neglected. Most of the persons who attempted to revive literature in the twelfth and thirteenth centuries, had received instruction or derived their principles of science from the Greeks in the eastern empire, or from the Arabians in Spain and Africa. Both these people, acute and inquisitive to excess, had corrupted those sciences which they cultivated. The former rendered theology a system of speculative refinement, or of endless controversy. The latter communicated to philosophy a spirit of metaphysical and frivolous subtlety. Misled by those guides, the persons who first applied to science were involved in a maze of intricate inquiries. Instead of allowing their fancy to take its natural range, and to produce such works of invention as might have improved their taste, and refined their sentiments; instead of cultivating those arts which embellish human life, and render it comfortable; they were fettered by authority, they were led astray by example, and wasted the whole force of their genius in specu-

lations as unavailing as they were difficult.

But fruitless and ill-directed as those speculations were, their novelty roused, and their boldness interested the human mind. The ardor with which men pursued those uninviting studies, was astonishing. Genuine philosophy was never cultivated, in any enlightened age, with more zeal. Schools, upon the model of those instituted by Charlemagne, were opened in every cathedral, and almost in every monastery of note. Colleges and universities were erected and formed into communities or corporations, governed by their own laws, and invested with separate and extensive jurisdiction over their own members. A regular course of studies was planned. Privileges of great value were conferred on masters and scholars. Academical titles and honors of various kinds were invented as a recompense for both. Nor was it in the schools alone that superiority in science led to reputation and authority; it became an object of respect in life, and advanced such as acquired it to a rank of no inconsiderable eminence. Allured by all these advantages, an incredible number of students resorted to those new seats of learning, and

crowded with eagerness into that new path which was opened to fame and distinction.

But how considerable soever these first efforts may appear, there was one circumstance which prevented the effects of them from being as extensive as they naturally ought to have been. *All the languages in Europe, during the period under review, were barbarous. They were destitute of elegance, of force, and even of perspicuity. No attempt had been hitherto made to improve or to polish them.* The Latin tongue was consecrated by the church to religion. Custom; with authority scarcely less sacred, had appropriated it to literature. All the sciences cultivated in the twelfth and thirteenth centuries were taught in Latin. All books with respect to them were written in that language. It would have been deemed a degradation of any important subject, to have treated it in a modern language. This confined science within a very narrow circle. The learned alone were admitted into the temple of knowledge; the gate was shut against all others, who were suffered to remain involved in their former darkness and ignorance.

But though science was thus prevented,

during several ages, from diffusing itself through society, and its influence was much circumscribed; the progress which it made may be mentioned, nevertheless, among the great causes which contributed to introduce a change of manners into Europe. The ardent, though ill-judged spirit of inquiry which I have described, occasioned a fermentation of mind that put ingenuity and invention in motion, and gave them vigor. It led men to a new employment of their faculties, which they found to be agreeable as well as interesting. It accustomed them to exercises and occupations which tended to soften their manners, and to give them some relish for the gentle virtues, peculiar to people among whom science had been cultivated with success.

From these observations, it is evident, that the study of the Latin tongue about the time of the revival of literature, was necessary to the improvement of the human mind, inasmuch as it furnished those who cultivated it with new ideas, and diverted their attention from the jargon of the schools, to the more useful occupations of taste and science. There was a propriety in the conduct of our ancestors in this respect, which we cannot sufficient-

ly commend. But that applause which reason confers on those who at that epoch rescued polite letters from the labyrinths of sophistry and barbarism, cannot be bestowed for the same cause, on their enlightened posterity. For the manners, the habits of thinking, the policy, the science of these latter times, have assumed a new aspect, and the knowledge of the middle ages is as much eclipsed by the resplendent sciences of the eighteenth century, as the light of a candle by the full blaze of glory which the luminary of day displays while in its meridian. What the most learned philosophers of those ages, could not conceive (or what would have been sacrilege to have conceived) is now readily understood by the boy at school. Even the noble discoveries which cost the indefatigable life of Newton to explore, are comprehended by young persons before they are sixteen years of age. The same remark applies to language. A boy of ten years of age, is better versed in the rudiments of grammar, than most of the writers of that obscure epoch. We are nevertheless indebted to many of the later moderns who wrote in the Latin tongue. They have rescued science from the rust of ages, and given a surprizing elasticity to the human mind. Their task was dull

and unpromising. They were to clear away the rubbish of the middle ages, and to prepare the elegant materials extracted from those precious relics of antiquity, which the ravenous jaws of time had not devoured, for all that splendor and invigorating richness which they have received from successive generations. Our language is now highly polished, and merits therefore, the deepest attention from our youth. The period of its advancement is indeed, but of a very recent date, and this circumstance cannot be otherwise accounted for, than by the reasons which have been assigned above, and by the total neglect of it, as a part of education in modern times.

Our neighbors have in this respect, far surpassed us in the improvements which they have given to their language. They have rendered the French tongue, both elegant and prolific ; and they are indebted for this polish to the patronage and encouragement that were afforded to French literature by the effeminate court of Lewis XIV. Works of science, literature, and pastime, were from that period, published in French. Rabelais and Montaigne began the French prose, and it received new graces from Voiture and Balzac. Poetry was gra-

dually polished by Marot, Ronsard, and Malherbe. But at length Corneille and Paschal arose to illuminate the hemisphere of letters. The former produced the *Cid*, a composition, which whether it be considered for its style or matter, is deservedly admired as a surprising effort of poetical genius. The Provincial Letters of the latter, continue to be universally regarded as a model of prose composition, as well as of delicate raillery and sound reasoning.

The observations of the French Academy on the *Cid*, are a striking proof of the rapid progress of taste in modern times, as the *Cinna*, of the same author, is of the early perfection of the French stage. These observations were made at the desire of Cardinal Richelieu, who had established in 1635, that Academy of Sciences and Belles Lettres; and who, not satisfied with being reputed, what he certainly was, the most penetrating statesman in Europe, was also ambitious of being thought what he was not, the most elegant poet in France. He was more jealous of the fame of Corneille than of the power of the house of Austria, and affairs stood still while he was concerting the criticism on the *Cid*.

That criticism contributed greatly to the improvement of polite literature in France. Corneille was immediately followed by Moliere, Racine, Quinault, Boileau, La Fontaine, and all the fine writers who shed lustre over the early part of the reign of Lewis XIV. The glaring figures of discourse, the pointed antithesis, the gingle of words, and every species of false wit and false refinement, which prevailed during the former reign, were banished with the romantic gallantry that had introduced them; and composition like manners returned in appearance to the simplicity of nature, adorned but not disguised by art. This elegant simplicity is more particularly to be found in the tragedies of Racine, the fables of La Fontaine, and the comedies of Moliere, whose wonderful talent for ridiculing whatever is affected or incongruous in behavior, as well as of exposing vice and folly, contributed not a little to that happy change which then took place in the manners of the French nation.

The same good taste extended itself to all the fine arts, and rendered France and the neighboring provinces, toward the latter part of the seventeenth century what Italy had been before, the favorite abode of classical elegance.

This pre-eminence which France first obtained in the improvement and extension of her language, as well as her local geographical situation, her relative situation in Europe and her ambitious wars, gave a currency to her language that has made it become at last the most universal language of the world. And however the men of letters in that country may study the Latin and Greek authors, yet, to speak and write with taste in their native language, is now considered as the most desirable point of excellence in French literature.

In the north of Europe belles lettres had made at that time no progress. The distractions and religious wars that tore every part of Germany and the adjoining countries, from the league of Smalkald to the peace of Westphalia, gave no leisure for the cultivation of language. These disputes doubtless tended to enlighten the human mind, and those wars to invigorate the human character; but amid such struggles which roused all the powers of the soul, and called forth all the emotions of the heart in vindication of the dearest interests of society, Germany produced consummate generals, sound politicians, deep divines, and even acute philosophers, but she made no advances in

belles lettres, nor any great improvement in her warlike language.

England, separated from the continent, and engaged in destructive civil wars, had no opportunity of perfecting its language, or of cultivating the belles lettres. Soon after the contests between the houses of York and Lancaster had ceased, every mind was occupied with the reformation of religion. And before the differences occasioned by them were removed, a civil war was lighted in the kingdom in behalf of civil liberty. Amid the fanaticism, passions, and animosities to which those struggles gave rise, there appeared many men of vast abilities. Then the force and the compass of our language, were first fully tried in the public papers of the King and Parliament, and in the bold eloquence of the speeches of the two parties. Then was roused in political and theological controversy the vigorous genius of John Milton, which, afterwards broke forth with so much lustre in the poem of *Paradise Lost*, unquestionably the greatest effort of human imagination. No poet, ancient or modern, is so sublime in his conceptions as Milton; and few have ever equalled him in boldness of description or strength of expres-

sion. Yet let us not, in blind idolatry, allow him the honor, which he seems to arrogate to himself, and which has seldom been denied him, of being the inventor of our blank verse. In the tragedies of Shakspeare are several passages as harmonious as any in *Paradise Lost*, and as elegantly correct; though it must be admitted, that Milton invented that variety of pauses, which renders English blank verse peculiarly proper for the heroic fable; where rhyme, how well constructed soever, is apt to cloy the ear by its monotony, and weaken the vigor of the versification, by the necessity of final words of similar sounds. The writings of Hooker are likewise strong and nervous, and there are some passages of Algernon Sydney's *Treatise on Government* remarkably harmonious and classical. Some of his letters in particular are beautiful.

But although the English tongue during the civil wars had acquired all the strength of which it is capable, it still wanted much of that taste which characterizes the language of a polished people, and which it has since attained. Waller, whose taste had been formed under the first Charles, and who wrote during the brightest days of the second, is one of the

chief refiners of our versification, as well as language. But the licentious reign of Charles II. though crowded with so many men of genius, was neither the æra of good taste nor of elegant manners in England. It may be seriously questioned whether the dissolute though comparatively polished manners of this once reputed Augustan age, were not more hurtful to literature and the liberal arts in England, than the cant and fanaticism of the preceding period.

It was not until the latter years of Dryden that a better taste in literature discovered itself. The example which the great writers of France had given by writing in their own tongue, even on philosophical subjects soon prevailed in England, which always sooner or later adopts the manners of that country. The liberal spirit of inquiry which Bacon had awakened soon communicated itself to his countrymen; and the enchanting system of morals which Shaftsbury drew, in opposition to the principles of Hobbes, (a man of deep reasoning) as well as the noble effort of Locke, in answer to Filmer, and his great work on Human Understanding, spread rapidly throughout the nation, gave rise to many other philo-

sophical works, and produced that degree of scepticism, which when properly directed, cannot fail to improve the reason and condition of man.

The age then of Louis XIV. when flourished in France, Corneille, Racine, De Retz, Moliere, Boileau, Fontaine, Baptiste, Rousseau, Bossuet, Fenelon, Bourdaloue, Paschal, Malebranche, Massillon, Bruyere, Bayle, Fontenelle, Vertot, produced also in England the classics Dryden, Pope, Addison, Prior, Swift, Parnell, Arbuthnot, Congreve, Otway, Young, Rowe, Atterbury, Shaftsbury, Bolingbroke, Tillotson, Temple, Boyle, Locke, Newton, Clarke.

Great Britain had not at that time produced a solitary historian of merit who wrote in his native language. In the writings of Lord Clarendon, there runs a great spirit of virtue and probity; but his sentences are often too long and his general manner is prolix. Besides, notwithstanding the seeming candor and impartiality in his relation of facts, he is reproached with being the professed apologist of the royal faction. Burnet is lively and perspicuous, but he also has met with a similar reproach

from the royalists, and been stigmatized as the apologist of the republican party. This gave rise to a pertinent remark of M. Voltaire, during his visit to this country, in an early part of the present century; he asserted that England had not one man of letters competent to write its history, and this too in the Augustan age of Queen Anne, or shortly after, and that it was indebted for its knowledge of its own history to the assiduity of a frenchman, M. Rapin de Thoyras. And the only man he named as fitted to the undertaking, was the translator of Tacitus. If I mistake not, this blemish on the English character still remains. Not an Englishman has yet been found to write the history of his own country, although it has been critically arranged by Henry, and elegantly executed by Hume. Scotland may proudly boast of the eminence of her men of letters. She claims to herself a Robertson, who in various branches of historical composition, and particularly in the histories of Charles V. and of his own country, has illuminated the dark annals of the age he described; she counts a Dalrymple, a Ferguson, a Hume; while England cannot boast of one historian who has enriched the literature of his country, by narrating the great

revolutions that have happened in it. We have produced a few eminent historians who have detailed the history of other countries with learning and taste, but these are comparatively few in number. The splendid and luminous volumes of Gibbon will transmit his name to future ages with admiration, for his depth of learning and industry of research. But amid the glaring and eloquent sentences which decorate his work, there is often, too often, a want of grammatical accuracy, and chasteness of style, into which he fell from his love of representing every trivial subject with pomp and majesty. His style is dangerous to imitate, and I question much, whether the present fashion of aping his manner, as well as that of the late Mr. Burke, be not eventually injurious to a correct and classical style. So much redundancy of expression, so many far fetched attempts at sublimity of composition, must destroy all the beauty and simplicity of language. And it remains to be seen, if the present rage for *fine writing* continue, whether we shall not have cause like Athens, corrupted in her eloquence by Demetrius Phalereus, to regret the influence of their example.

However, we may boast of excellent writers,

whose miscellaneous compositions are proper to be read by a child. And the language will improve in proportion as those classics are made the foundations on which future authors are to raise an elegant superstructure. The writers in the reign of Queen Anne, may be justly considered as excellent models for imitation.

Mr. Hume, has observed, that the elegance and propriety of style have been very much neglected among us. To what must we attribute this defect, but to our carelessness in applying to the study of our own language? When the above remark was written, there existed in this country the most profound and consummate Grecians and Latinists: it is evident therefore, that the exclusive study of Greek and Latin are incompetent to the melioration of our style. Indeed, from the structure of our language, (as I shall prove hereafter) there is a great dissimilarity between the English and the Greek or Latin tongues. Those inversions of language which give such softness and melody, as well as force to the latter, would appear nonsensical, at least obscure and perplexing, if adopted in English. Their beauties of composition may be felt, but cannot be imitated by us without exciting disgust.

Of this we need no further evidence than the prose writings of Milton, whose sublime genius and extensive erudition, capacitated him almost for any undertaking. Yet, having vainly attempted to transfuse the elegance of the ancients into his prose compositions, by the inversion of his periods, he has rendered his text uniformly difficult, dark, and sometimes unintelligible. Most of the writings of Mr. Gordon are liable to the same animadversion,

We have no dictionary of our language, says Hume, and scarcely a tolerable grammar. The first polite prose we have was writ by a man (Dean Swift) who is still alive. As to Sprat, Locke, and even Temple, they knew too little of the rules of art to be esteemed elegant writers. The prose of Bacon, Harrington, and Milton, is altogether stiff and pedantic, though their sense be excellent. Men in this country have been so much occupied in the great disputes of religion, politics, and philosophy, that they had no relish for the seemingly minute observations of grammar and criticism. And though this turn of thinking must have considerably improved our sense and our talent of reasoning, it must be confessed, that, even in those sciences above men-

tioned, we have not any standard book which we can transmit to posterity : and the utmost we have to boast of are a few essays towards a more just philosophy ; which indeed promise well, but have not as yet reached any degree of perfection.

Such was the opinion of Mr. Hume in the year 1742, when his Essay on Civil Liberty was first published. Since that time, however, the laborious industry of our great lexicographer Dr. Johnson, has furnished us with a dictionary of our language, and the critical skill in philology of Lowth, Priestley, Harris, and Campbell have afforded something in the shape of a *tolerable* grammar, although doubtless, much yet remains to be done. Our language has also received considerable improvements from many eminent writers, and I know of no better exception to the remark of Mr. Hume, than Mr. Hume himself. In his compositions, we have several standard books, which not only promise well, but which will be handed down to the latest posterity. His Essays on taste, eloquence, and on the rise and progress of the arts and sciences would immortalize his name, if even all his other works were to perish,

which is impossible. The essay on eloquence, though short, is a master-piece, and I must confess, that I have never risen from the perusal of it, without regretting that I am neither an Athenian nor a Roman, and without feeling my bosom glow with sensations that I have never been able to express.

But, let us not suppose that Mr. Hume discourages our plan. In the beautiful essay on eloquence, he points out the æra of the revival of the glory of ancient oratory even in Britain. "It may be pretended, says he, that the disorders of the ancient governments, and the enormous crimes of which the citizens were often guilty, afforded much ampler matter for eloquence than can be met with among the moderns. Were there no VERRES or CATILINE, there would be no CICERO. But that this reason can have no great influence, is evident. It would be easy to find a PHILIP in modern times; but where shall we find a DEMOSTHENES?"

What remains, then, but that we lay the blame on the want of genius or of judgment in our speakers, who either found themselves incapable of reaching the heights of ancient elo-

quence, or rejected all such endeavors as unsuitable to the spirit of modern assemblies? A few successful attempts of this nature might rouse the genius of the nation, excite the emulation of the youth, and accustom our ears to a more sublime and more pathetic elocution, than what we have been hitherto entertained with. There is certainly something accidental in the first rise and progress of the arts in any nation. I doubt whether a very satisfactory reason can be given, why ancient Rome, though it received all its refinements from Greece, could attain only to a relish for statuary, painting, and architecture, without reaching the practice of these arts: while modern Rome has been excited by a few remains found among the ruins of antiquity, has produced artists of the greatest eminence and distinction. Had such a cultivated genius for oratory, as Waller's for poetry, arisen, during the civil wars, when liberty began to be fully established, and popular assemblies to enter into all the most material points of government; I am persuaded so illustrious an example would have given a quite different turn to **BRITISH** eloquence, and made us reach the perfection of the ancient model. Our orators would then have done honor to their country, as well as

our poets, geometers, and philosophers, and British Ciceros have appeared, as well as British Archimedeses and Virgils.

But to return. We may with great propriety recommend the classics of Queen Anne's reign to the attention of the English student. Before that time, we have little to boast of among our prose compositions in point of taste, however excellent their matter. The bar, the pulpit, and the senate, were infected with an affectation of wit, that is truly disgusting. The quaintness that every where pervades the writings of Sir Edward Coke, the puns that so frequently excite our merriment, in the sermons of good Bishop Latimer, and the quibbles that passed current in the speeches from the throne, as well as in popular debate, will give us a tolerable idea of the elocution of our forefathers. There are, no doubt a few exceptions from this remark, among which, Hooker's Ecclesiastical Polity, Sir Walter Raleigh's History of the World, and the translation of the Bible are peculiarly distinguished, as striking proofs of the progress of English prose.

In reverting to our former proposition, respecting the sudden change that took place in

polite literature, from the time of the institution of the French Academy, it is impossible to deny that its effects have, in a great measure, superseded the *necessity* of studying the dead languages as the means of acquiring a just taste for English composition. Knowledge, and and even criticism have become so universally diffused, that we can frequently discover specimens of good writing, among that part of the community, which has not profited by an acquaintance with ancient learning. If we consider the structure of our language, we shall immediately perceive that French and not Latin, is the proper object of our earliest application. The English is compounded of the French and the ancient Saxon languages. The French was introduced into Britain by the Norman conquest, and continued, till the time of Edward III. to be the sole language of the court. The English, which came to be spoken afterwards, and which continues to be spoken now, is a mixture of the ancient Saxon and this Norman French. As the English language, therefore, is more complex in its composition than either the French or the Italian, so is it likewise more simple in its declensions and conjugations. Those two languages retain, at least, a part of the distinction

of genders, and their adjectives vary their termination according as they are applied to a masculine or to a feminine substantive. But there is no such distinction in the English language, whose adjectives admit of no variety of termination. The French and Italian languages have, both of them, the remains of a conjugation ; and all those tenses of the active voice, which cannot be expressed by the possessive verb joined to the passive participle, as well as many of those which can, are in those languages, marked by varying the termination of the principal verb. But almost all those other tenses are in the English eked out by other auxiliary verbs, so that there is in this language scarce even the remains of a conjugation. *I love, I loved, loving*, are all the varieties of termination which the greater part of English verbs admit of. All the different modifications of meaning, which cannot be expressed by any of those three terminations, must be made out by different auxiliary verbs joined to some one or other of them. Two auxiliary verbs supply all the deficiencies of the French and Italian conjugations ; it requires more than half a dozen to supply those of the English, which, besides the substantive and possessive verbs, make use of *do, did ; will,*

would; shall, should; can, could; may, might.

I shall conclude my remarks on this subject with citing the authority of three eminent writers, who have greatly contributed to promote the culture and improvement of our language. The first is from Dr. Priestley, the second from Bishop Lowth, and the last from Professor Blair.

I own I am surprized to see so much of the distribution, and technical terms of the Latin grammar, retained in the grammar of our tongue; where they are exceedingly awkward, and *absolutely superfluous*; being such as could not possibly have entered into the head of any man, who had not been previously acquainted with Latin. A little reflection may, I think, suffice to convince any person, that we have no more business with a future tense in our language, than we have with the *whole system of Latin moods and tenses*; because we have no modification of our verbs to correspond to it; and if we had never heard of a future tense in some other language, we should no more have given a particular name to the combination of the verb with the auxiliary *shall* or *will*, than to

those that are made with the auxiliaries *do*, *have*, *can*, *must*, or any other. It is possible I may be thought to have leaned too much from the Latin idiom, with respect to several particulars in the structure of our language; but I think it is evident, that all other grammarians have leaned too much to the analogies of that language, contrary to our modes of speaking, and to the analogies of other languages more like our own. It must be allowed, that the custom of speaking is the original, and only just standard of any language. We see, in all grammars, that this is sufficient to establish a rule, even contrary to the strongest analogies of the language with itself. Must not this custom, therefore, be allowed to have some weight, in favor of those forms of speech, to which our best writers and speakers seem evidently prone; forms which are contrary to no analogy of language with itself, and which have been disapproved by grammarians, only from certain abstract and arbitrary considerations, and when their decisions were not prompted by the genius of the language; which discovers itself in nothing more than in the general propensity of those who use it to certain modes of construction.

A circumstance which may give us hopes to see the speedy accomplishment of the design of completing the grammar of our language, is the exceeding great simplicity of its structure, arising, chiefly, from the paucity of our inflections of words. For this we are, perhaps, in some measure indebted to the long continued barbarism of the people from whom we received it. The words we afterwards borrowed from foreign languages, though they now make more than one half of the substance of ours, were like more plentiful nourishment to a meagre body, that was grown to its full stature, and become too rigid to admit of any new modification of its parts. They have added considerably to the bulk and gracefulness of our language; but have made no alteration in the simplicity of its original form.

The propriety of introducing the English grammar into English schools, cannot be disputed; a competent knowledge of our own language being both useful and ornamental in every profession, and a critical knowledge of it absolutely necessary to all persons of a liberal education. The little difficulty there is apprehended to be in the study of it, is the chief reason, I believe, why it hath been so

much neglected. *The Latin was so complex a language, that it made of necessity* (notwithstanding the Greek was the learned tongue at Rome) *a considerable branch of Roman school education* ; whereas ours, by being more simple, is, perhaps, less generally understood. And though the grammar-school, be, on all accounts, the most proper place for learning it ; how many grammar-schools have we, and of no small reputation, which are destitute of all provision for the regular teaching of it ? Indeed, it is not much above a century ago, that our native tongue seemed to be looked upon as below the notice of a classical scholar ; and men of learning made very little use of it, either in conversation, or in writing. And even since it hath been made the vehicle of knowledge of all kinds, it hath not found its way into the schools appropriated to language, in proportion to its growing importance. To obviate this inconvenience, we must introduce into our schools *English Grammar, English compositions,* and frequent *English translations* from authors in other languages. The common objection to English compositions, that it is like requiring bricks to be made without straw ; (boys not being supposed to be capable of so much reflection, as is necessary to treat any subject)

with propriety) is a very frivolous one; in many of which the whole attention may be employed upon language only; and from thence youth may be led on in a regular series of compositions, in which the transition from language to sentiment may be as gradual and easy as possible.

The English language is perhaps of all the present European languages by much the most simple in its form and construction. Of all the ancient languages extant, that is the most simple, which is undoubtedly the most ancient: but even that language itself does not equal the English in simplicity. The words of the English language are perhaps subject to fewer variations from their original form, than those of any other. Its substantives have but one variation of case; nor have they any distinction of gender, beside that which nature hath made. Its adjectives admit of no change at all, except that which expresses the degrees of comparison. All the possible variations of the original form of the verb are not above six or seven; whereas in many languages they amount to some hundreds: and almost the whole business of modes, times, and voices, is managed with great ease by the assistance of

eight or nine commodious little verbs, called from their use auxiliaries. The construction of this language is so easy and obvious that our grammarians have thought it hardly worth while to give us any thing like a regular and systematical syntax. In truth, the easier any subject is in its own nature, the harder is it to make it more easy by explanation; and nothing is more unnecessary, and at the same time commonly more difficult, than to give a demonstration in form of a proposition almost self-evident. It doth not then proceed from any peculiar irregularity or difficulty of our language, that the general practice both of speaking and writing it is chargeable with inaccuracy. It is not the language, but the practice, that is in fault. The truth is, grammar is very much neglected among us: and it is not the difficulty of the language, but on the contrary the simplicity and facility of it, that occasion this neglect. Were the language less easy and simple, we should find ourselves under a necessity of studying it with more care and attention. But as it is, we take it for granted, that we have a competent knowledge and skill, and are able to acquit ourselves properly, in our own native tongue: a faculty solely acquired by use, conducted by

habit, and tried by the ear, carries us on without reflection; we meet with no rubs or difficulties in our way, or we do not perceive them; we find ourselves able to go on without rules, and we do not so much as suspect, that we stand in need of them.

A grammatical study of our own language makes no part of the ordinary method of instruction, which we pass through in our childhood; and it is very seldom that we apply ourselves to it afterward. Yet the want of it will not be effectually supplied by any other advantages whatsoever. Much practice in the polite world, and a general acquaintance with the best authors, are good helps; but alone will hardly be sufficient: we have writers, who have enjoyed these advantages in their full extent, and yet cannot be recommended as models of an accurate style. Much less then will what is commonly called learning serve the purpose; that is, a critical knowledge of antient languages, and much reading of ancient authors: the greatest critic and most able grammarian of the last age, when he came to apply his learning and his criticism to an English author, was frequently at a loss in matters of ordinary use and common con-

struction in his own vernacular idiom. A good foundation in the general principles of grammar is in the first place necessary for all those, who are initiated in a learned education; and for all others likewise, who shall have occasion to furnish themselves with the knowledge of modern languages. Universal grammar cannot be taught abstractedly: it must be done with reference to some language already known; in which the terms are to be explained, and the rules exemplified. The learner is supposed to be unacquainted with all, but his native tongue; and in what other, consistently with reason and common sense, can you go about to explain it to him? When he has a competent knowledge of the main principles of grammar in general, exemplified in his own language, he then will apply himself with great advantage to the study of any other. To enter at once upon the science of grammar, and the study of a foreign language, is to encounter two difficulties together; each of which would be much lessened by being taken separately and in its proper order. For these plain reasons a competent grammatical knowledge of our own language is the true foundation, upon which all literature, properly so called, ought to be raised. If this method were adopted in our

schools; if children were first taught the common principles of grammar, by some short and clear system of English grammar, which happily by its simplicity and facility is perhaps fitter than that of any other language for such a purpose; they would have some notion of what they were going about, when they should enter into the Latin grammar; and would hardly be engaged so many years, as they now are, in that most irksome and difficult part of literature, with so much labor of the memory, and with so little assistance of the understanding.

Whatever the advantages, or defects of the English language be, as it is our own language, it deserves a high degree of our study and attention, both with regard to the choice of words which we employ, and with regard to the syntax, or the arrangement of these words in a sentence. We know how much the Greeks and the Romans, in their most polished and flourishing times, cultivated their own tongues. We know how much study both the French and the Italians, have bestowed upon theirs. Whatever knowledge may be acquired by the study of other languages, it can never be communicated with advantage, unless by such as can write and speak their own lan-

guage well. Let the matter of an author be ever so good and useful, his compositions will always suffer in the public esteem, if his expression be deficient in purity and propriety. At the same time, the attainment of a correct and elegant style, is an object which demands application and labour. If any imagine they can catch it merely by the ear, or acquire it by a slight perusal of some of our good authors, they will find themselves much disappointed. The many errors, even in point of grammar, the many offences against purity of language, which are committed by writers who are far from being contemptible, demonstrate, that a careful study of the language is previously requisite, in all who aim at writing it properly.

These observations appear to determine conclusively the subject which we have been discussing; they will suffice therefore to prove, that the application of a child to a dead language, before he is acquainted with his own, is a lamentable waste of time, and highly detrimental to the improvement of his mind. It was the neglect of the cultivation of our own tongue, which excited the reproach of M. Voltaire.

The general principles of grammar are common to all languages; a noun is the same in English, French, Latin, Greek, &c. The varieties of languages are easily acquired by observation and practice, when a preliminary knowledge of our own grammar is obtained. But, the comprehension of our native tongue, is not the only good preparative for the study of other languages. Some previous acquaintance with the general nature of things is necessary to the accomplishment of this end, in order that our literary progress may be obstructed merely by words. For, although it be useful to leave some difficulties in the way of a child, that he may exercise his mind in overcoming them, yet he must not be disgusted by too many or too great impediments. Our whole attention should consist in proportioning the difficulties to his powers, and in offering them to his consideration individually. If Latin were made the primary object of a child's lessons, he would lose a vast portion of time in the study of grammar; he would be incapable of perceiving the beauties of that language, because he would not have acquired any previous knowledge. No benefit therefore could possibly accrue, from reading in the Latin tongue subjects which he could

not understand in his own. But, by his becoming well acquainted with our best poets and prose writers, he will easily learn, independently of the number of ideas which he will gain thereby, the general rules of grammar ; several examples will unfold them, and a proper application of others may be soon made without difficulty. Besides, he will acquire taste and judgment, and be well prepared to feel the beauties of a foreign tongue, when he begins to feel the beauties of his own. His knowledge being also extended and diversified, it will be found, that the sole difficulty attendant on the study of Latin, consists in learning words ; so that to obtain a just knowledge of things, he must apply himself to such Latin authors only as are within the reach of his capacity, and whose writings he can comprehend with the same facility as if they were written in his native language. By this plan, he will easily acquire the Latin tongue, treasure up fresh knowledge as he advances, and experience no disgusts in the study of it. Nothing can be more useless than to fatigue a child, by filling his memory with the rules of a language which he does not yet understand. For, of what advantage is the knowledge of all its rules, if he be unable to apply them ? We

should wait therefore until reading has gradually enlightened his mind, and the task becomes less irksome to him. When he has studied his own language, we should anticipate the principal differences between the Latin and English syntax. His surprize in perceiving an unexpected difference, will excite his curiosity, and effectually remove all distaste. After this, and not before, we may devote a part of each day to Latin ; but it ought never to be the principal object of his studies.

Such is the outline of this plan of education, which has nature for its basis, and reason for its superstructure ; but such a plan, it must be granted, is not to be found in any of our seminaries of learning. Their system inverts knowledge ; the present proposes to make it orderly and progressive. Theirs is founded on precedent and long established usage ; this has nothing to recommend it but its obvious utility and its economy of time. To those parents who would be rather amused with the pert loquacity of children, than with their slow advancement at the beginning of their education ; to those who would rather see them shine while infants, than possess substantial knowledge when men, this system has neither charms, nor

temptations. But to those who regard instruction merely as an introduction to future pursuits, and every kind of education only as the preparation for accomplished manhood ; to those who will await patiently the display of genius, wit, and talents, this plan not only proffers advantages, but it will amply repay their patience, by the rapid progress of youth in every useful acquirement, during the latter part of their studies. And it will be found that if the mind have moved but slowly at first, it increases its velocity as it moves, by adding to itself, like the snow ball, fresh substance every bound it gives.

There remains now but one subject to consider and we shall have distinctly unfolded the series of the plan. Morality, manners, health, and attention have been insisted upon above, as the indispensable ingredients of a good education, and on the other hand, respect to the mind of the pupil, and readiness to teach him what he feels an aptitude to acquire ; the rejection of every kind of severity, and the application of gentle medicaments to the little disorders that may arise in the course of youthful levity, are the requisites demanded from the parents, or tutor. Whether all these things are

best secured by a public or a private education has been long a subject of controversy. Both have their advantages as well as their defects. If this system were to be adopted in public schools, the different classes might be arranged agreeably to the methods which have been proposed without any difficulty whatever, and every objection which might be raised against its novelty, would vanish on the experiment. Time itself, would improve and finally ripen it into perfection. If, on the contrary, public schools be considered as disadvantageous to the morals of youth (a most formidable and unanswerable objection, if true) it must be prosecuted in the tranquil shade of domestic society, beneath the roof of parents, the natural preceptors and guardians of youth. *Si studiis quidem scholas prodesse, moribus autem nocere constaret, potior mihi ratio vivendi honeste, quam vel optime dicendi, videretur.*

In early ages, the education of youth was entrusted only to the first ranks in society. This profession was practised in Greece by Homer, as we learn from his life, falsely ascribed to Herodotus, yet certainly very ancient. In Gaul, it belonged to the Druids.

It appears to be the safer method to derive advantage from both means of instruction, without incurring the dangers which attend on either of them (for there are dangers attendant on a private education also) by consolidating them into one. In Holland and Swisserland, it has been practised with success, and boys resort during several hours of the day to public schools and colleges, but always take their meals and sleep at home. The education of boys at distant colleges, of young ladies in distant boarding schools, seems in the higher ranks of life, to have hurt most essentially the domestic morals, and consequently the domestic happiness both of France and England. Do you wish to educate your children to be dutiful to their parents, to be kind and affectionate to their brothers and sisters? put them under the necessity of being dutiful children, of being kind and affectionate brothers and sisters: educate them in your own house. From their parents house they may, with propriety and advantage, go out every day to attend public schools: but let their dwelling be always at home. Respect for you must always prove a very useful restraint upon their conduct, and respect for them may frequently impose no useless restraint upon your own. Surely no acquirement, which can possibly be

derived from what is called a public education, can make any sort of compensation for what is almost certainly and necessarily lost by it. Domestic education is the institution of nature; public education the contrivance of man. It is surely unnecessary to say which is likely to be the wisest.

CHAP. IV.

*Of the Education of the Middling classes of the
Community.*

THE preceding chapters have been employed in the refutation of those prejudices respecting education, which time and opinion have consecrated, in defiance of reason and experience. It has been my object, to anticipate, and to remove every objection, which seems likely to be raised against the ensuing plan. Although the discussion has occupied much of our attention, yet, it has not been altogether without its advantages ; because, it has led to an investigation of the powers and processes of the human understanding, which is of itself, the most interesting portion of the elements of civil knowledge. The subject on which we now enter, comprizes a practical illustration of the principles, which have been established in the former chapters, and therefore, may be said to combine practice with theory.

The education of youth, has on one occasion only, excited the attention of the British legislature. We are informed in the Parliamentary History, that during the reign of James I. a committee of dignified personages, with the Prince of Wales at its head, was appointed for the express purpose of taking this subject into consideration. And although the Parliament was adjourned during pleasure, to afford time and leisure to bring the plan to perfection, yet this noble undertaking fell to the ground with the death of its author the Duke of Buckingham.

The subject has never since been revived in either house of Parliament; for during the usurpation of Cromwell, learning and knowledge were esteemed heathenish accomplishments; and if the reasons alledged in the first chapter of the former part of this work, be just, it is, in one sense, not to be regretted. For though I admit that the magistrate is bound to provide for the education of all the people, yet, I deny the necessity and even the propriety of investing him with the power of control over the methods which may be judged proper to effect that salutary purpose. The road is, therefore, by the silence of the legis-

lative, open to every rational adventurer, and on this consideration, I pursue the subject, with ardour, but with all becoming deference to established habits, and to the superior knowledge of better informed men.

To present a certain and adequate remedy against public disorders, to avert the mischiefs which spring from private vices, alleviate misfortune, and to augment public happiness, are the objects of a National Education. The means to be employed for the attainment of these objects, are, a good institution of morality, and knowledge

Of morals, we have amply treated in former chapters; the communication and acquirement of knowledge, constitute the sole objects of the following chapters. The establishment of a system so important and extensive, may be effected without laying any claims to perfection. A perfect system is not within the grasp of humanity: time and experience must correct deficiencies, and to begin well, is the first department of prudence, and all that can be desired or expected from virtuous and discreet measures. Eminent scholars, are the brightest ornaments of a nation, but the cultivation

of ancient literature must be confined comparatively to a few, it never can become a national object in an institute of public education. Hence, the application of several years to the dead languages, by young persons whose views and situation in life, are such as to preclude them from deriving any advantage or pleasure from this study, is an unprofitable and censureable waste of time. And though the attainment of classical learning, should be open to every one desirous of feeling its charms, yet, it should never be made a matter of necessity with boys destined to the inferior occupations. The same course of studies, cannot be proper for the lawyer, the divine, the physician, the soldier, the sailor, the merchant and the mechanic; and therefore, some other mode of instruction must be devised, different books read, and different exercises performed, in order to render youth competent to engage in their several spheres of active life, with credit to themselves, and profit to the community. The present system of education is distributed like a quack medicine in equal proportions, to all constitutions, and in all disorders; it was framed in times of popery and arbitrary power; an age when knowledge only began to dawn, after that long night which darkened all efforts of

genius, and eclipsed with clouds of barbarous sophistry, the luminous productions of Greece and Rome. But what cannot fail to excite our admiration and pity at the obstinacy of established prejudices, it has subsisted for three centuries, unaltered by the revolutions which have taken place, in the religious, political, and moral government of mankind, as well as in their manners, customs, and opinions.

The causes of all these absurdities may be traced to one source. Ever since the days of Henry the eighth, the stipend given for the instruction of boys, has remained nearly the same. The poor Schoolmaster, whose relative importance in society is much greater than the world imagines, is obliged to labour and toil for very low and inadequate sums, when the prices of all other masters and artists, have increased in proportion to the increased wealth of the community. This hardship compels every master to make up in number, what is deficient in weight; and to procure a competency, he is under the necessity of taking more boys under his care, to whom it is impossible he can do justice, or pay sufficient attention. In consequence of this necessity, four capital defects are to be found in the present mode of instruc-

tion. The first is, that the divine and the mechanic are educated alike, not merely in those elementary parts of knowledge, which are as proper for the latter to be taught as the former; but in parts, which are necessary to the one and loss of time to the other; in languages which the divine should not only fully comprehend and appreciate, but which to the mechanic, are of no use whatever. From this corruption of true principles, we assign names to persons, who are very often not entitled to them. We call a divine, one who has taken his bachelor's or master's degree; a counsellor, one who has eaten commons during twelve terms in one of the Inns of Court, and paid his fees; a physician, one who has observed certain trifling forms, and taken a degree in one of our universities; a colonel in the army, one who has just left school, (perhaps may be yet at school,) and has given four or five thousand pounds for the honour of his rank, and the pleasure of wearing a red-coat; and lastly, a legislator, is one who has, (I was going to say, purchased) a seat in the House of Commons.

Latin and Greek, are esteemed sufficient for all these purposes, as if all human knowledge were concentrated, in these two dead languages,

in which, no one ever thinks, writes, or converses. Formerly the study of these languages was necessary, as I have already shown, to acquire any portion of that little knowledge which prevailed in the western parts of Europe. But now, when all sense is not exclusively attached to the learned professions; when, from the abolition of the feudal system, a new distinction of ranks has been created, the mechanical arts have been separated into distinct occupations, and commerce has given an astonishing ascendancy, to those who are engaged in it, a different mode of education *must* be necessary for those who are to be in active life, and those who pursue the learned professions. By observing a proper medium, we may arrive at something advantageous.

The second defect consists in the absurd employment of a great portion of time in writing exercises. Performances of this kind require invention and judgment; it is therefore impossible for boys to execute them, when neither the store-house of memory, is supplied with materials, the understanding ripened by habits of reflection, nor the taste formed by rules of criticism, and the perusal of the best authors.

The third, is the ridiculous custom of forcing all to be poets in despite of nature, and of reason. Every boy of a class, is obliged to write the same number of Latin verses, notwithstanding the differences in their genius, and capacity.

The fourth defect is very material, because its tendency is to damp all spirit of emulation. Boys are arranged in classes according to their different standing, and remain the same length of time, in the same class. From this pernicious practice, it follows, either that those of the quickest parts must be retarded in their progress by waiting for those of the slowest, or those of the slowest must be compelled to keep pace with the quickest, which is impossible, and must induce a state of absolute ignorance.

From all these circumstances, the master is obliged, in order to avoid the appearance of partiality, to act towards all by one general rule. And, as the low prices to masters of grammar schools are still continued, it is absolutely out of their power to deviate from this practice, by dividing with able assistants the objects of public instruction. It is a serious blemish in the character of all parents, that they literally give larger wages to the men who train their dogs and horses,

than to those, who are to form the minds of their children, to good or evil, to happiness or misery. It is a shame that not a fourth of what is commonly paid to the dancing master, is allotted to the tutor; it is insufferable, that opera dancers, singers, mimics, and buffoons, riot in wealth, while the learned preceptor, languishes, in the midst of a laborious employment, in obscurity, and often in poverty. This complaint is as old as the time of Hen. VIII. Roger Ascham, who was tutor to Queen Elizabeth, has the following remarkable passage on this head. "Pity it is that commonly more care is had, yea, and that among very wise men, to find out rather a cunning man for their horse, than a cunning man for their children. They say nay, in word, but they do so in deed: For to one they will gladly give a stipend of two hundred crowns by the year, and loth to offer to the other two hundred shillings. God! that sitteth in heaven, laugheth their choice to scorn, and rewardeth their liberality as it should. For he suffereth them to have tame and well ordered horses, but wild and unfortunate children; and therefore in the end, they find more pleasure in their horse, than comfort in their child."

The contrast which Mr. Thomas Sheridan,

drew in 1769, between the education of France and England is so striking, that it cannot fail to impress our minds with no small degree of mortification. There was a time, says he, when England was superior to France in every point; in arts, sciences, and arms. Their mode of education, their government, their religion, were then much the same; so that it is probable nothing but a superiority of genius in the people, gave Britain the pre-eminence. Richelieu saw this. He laid a plan for the future greatness of France. He knew that men, like land, were to be improved only by culture. He changed their mode of education; he established several academies. His successors added to them, and improved upon his design; so that there are in France numbers of seminaries, where the youth may have every assistance, both in theory and practice towards making themselves masters in any profession or art, to which their genius or choice may direct them, whether in civil or military life, in arts or sciences. They have academies for politics, in all their various branches, in which they are so minute as to have a particular one for the study of treaties only. They have abundance of military academies. They have academies of sciences, academies of painting, sculpture, and arch-

itecture ; academies of the belles lettres, academies for the study of their own language, and of oratory. Out of these nurseries they can constantly draw supplies of able statesmen, ambassadors, negociators and well principled and skilful officers ; excellent writers, in spite of the native poverty of their language, upon all sorts of subjects ; ingenious artists of all kinds, by the improvement of whose taste in their several manufactories, France is supplied with a greater fund of treasure, than she could have been by the richest gold mines. And what is most wonderful of all, admirable orators (never known to have sprung up before under an arbitrary government) and the most excellent compositions in eloquence that the moderns can boast of, in a language the least fitted of any for the purposes of oratory. By these means she has made such a rapid progress in the career of glory, as to astonish and dazzle the eyes of Europe ; whilst England, which was a long time foremost in the race, must now yield the prize, or if she attempt to vie with her in any of those arts, it must not be by a comparison of the living, but of the dead. What has occasioned this wonderful change ? Let us see whether it can possibly be accounted for upon any other principle but one ; I mean the different modes

of education in the two countries. England and France had once the same mode; England was then confessedly superior. France changed her mode of education; England did not. Richelieu began the work, his successor carried it to perfection. Buckingham endeavoured to rival him, was foiled by the factious spirit of the times; his successors never revived the attempt: the education remains the same unto this day. From that hour to this, France has been gaining, and England losing ground. If their present disparity does not arise from that principle, it must certainly arise from some material changes, made in the political or religious systems of these countries. Let us see what those changes were, and then judge whether they were likely to produce such an effect. Let us fix for the æra, the ministry of Richelieu, at the beginning of which, England was confessedly superior to France. Her religion has continued the same, so that she could derive no advantage from that article. Her constitution indeed, underwent a change for the worse, as absolute monarchy found no firm settlement there, till some years afterwards; and this, in the usual course of things, ought rather to have prevented, than promoted her improvement. Now let us see what changes were made in England. Pre-

vious to that date we had begun a reformation in religion, which was afterwards confirmed ; we boasted, and with just reason, of our pre-eminence over France in this respect. We made a change in our constitution ; after various struggles we established a government upon the best principles and after the best model in the world. All this makes in our favour ; and on the first view we should pronounce that if England were superior to France previous to these changes, she must at this day be infinitely before her. But alas ! it is to be feared that these advantages are but ideal.

That the present splendor of France is entirely owing to the improvements made in their education will admit of the most ample proofs. Let it be considered that previous to these improvements, France made but a contemptible figure in Europe, notwithstanding her extent of territory, and number of subjects. She had no reputation for arts, arms, or policy ; her language was poor, and her manners brutal ; her lands were uncultivated, her commerce neglected, and her country was untrodden by foreign feet. What was she in a short space of time after the institution of those seminaries ? Let the reign of Lewis xiv. declare. What is she now ? Is she not in the most essential points the mistress of Europe ?

Do not the youth of all countries go to pay homage to this Queen among the nations, whilst her own subjects keep their state at home? Are not her laws of fashion and of dress every where obeyed? Is not her language the currency almost of the world? Her rapid progress in arms, in commerce, in policy, is too notorious to need being mentioned.

There is a great deal of truth in the representation, and I will venture from my own observation and experience, during a long residence in that country, to assert, that the establishments, and public edifices for the convenience of public instruction, surpassed (before the revolution) those of any nation in ancient or modern times. In most of these foundations, it is true, the Greek and Hebrew languages, were not much cultivated. But, with these exceptions, where is the language, science, or art, that was not taught by able masters? The late Revolution has laid prostrate all these institutions, and supplied their places, with a philosophy that is sordid, and a freedom that is not liberal. When I consider, said the great Mr. Burke, the face of the kingdom of France; the multitude, and opulence of her cities; the useful magnificence of her spacious high roads and bridges; the opportunity

of her artificial canals and navigations opening the conveniences of maritime communication through a solid continent of so immense an extent; when I turn my eyes to the stupendous works of her ports and harbours, and to her whole naval apparatus, whether for trade or war; when I bring before my view the number of her fortifications, constructed with so bold and masterly a skill, and made, and maintained at so prodigious a charge, presenting an armed front and impenetrable barrier to her enemies upon every side; when I recollect how very small a part of that extensive region is without cultivation, and to what complete perfection the culture of many of the best productions of the earth have been brought in France; when I reflect on the excellence of her manufactures and fabrics, second to none but ours, and in some particulars not second; when I contemplate the grand foundations of charity, public and private; when I survey the state of all the arts that beautify, and polish life; when I reckon on the men she has bred for extending her fame in war, her able statesmen, the multitude of her profound lawyers and theologians, her philosophers, her critics, her historians and antiquaries, her poets, and her orators sacred and profane, I behold in all this something which

awes and commands the imagination ; which checks the mind on the brink of precipitate and indiscriminate censure, and which demands that we should very seriously examine, what and how great are the latent vices that could authorize us at once to level so spacious a fabric with the ground. I do not recognize, in this view of things, the despotism of Turkey. Nor do I discern the character of a government, that has been, on the whole, so oppressive, or so corrupt, or so negligent, as to be utterly unfit *for all reformation*. I must think such a government well deserved to have its excellencies heightened ; its faults corrected ; and its capacities improved into a British constitution.

Let us return to our subject. If it be true that the present generation are vicious, it is too late to hope for their reformation. The early lessons of wisdom and prudence are effaced, and habits of error and vice are rivetted in their minds ; therefore, precept and example can have but trifling influence, with those who knowing what is right, pursue wrong from inclination. Yet, the most profligate parent must wish to see a better route paved for his offspring, that the errors into which himself has fallen, may be shunned by his child. One

such generation carefully trained in the principles of virtue and knowledge, and instructed in such a way as to qualify them for their several stations, professions, and offices in life, would introduce a system of manners very different from the old. They would enter the great world prepared with an antidote against the poisonous cup of Circe ; they would look with contempt on the mistaken pursuits of their predecessors, and with horror on their vices and impieties. They would be in no danger from the contagion of example, for they would fly from the society of those, whose principles and tastes, were so opposite to theirs, and associate only with each other. They would become a close and impenetrable phalanx in the cause of piety and virtue, not to be shaken by the lax and dissipated forces, enlisted under the banners of irreligion and vice. Each succeeding race would join and strengthen this corps ; till the old dark generation should gradually pass away, like the moon over the face of the sun, when she leaves him with all his brightness in the sky, as a giant rejoicing to run his course. It is of no use making gloomy representations of the vices of the country. The world will consider it only as empty declamation, we shall therefore point out the reme-

dy. Men long inured to vice, and habituated to folly, afford rare instances of reformation. The reform wanted is in the education of youth. To attempt, by force of argument to accomplish a general reformation in a corrupt state, ever has and ever will be as vain as preaching to the winds. The wisest men have in many successive generations, squandered their talents on this fruitless enterprize. Whereas had they turned their attention from the hopeless, to the young and rising generation, they would have fortified them against that depravity which is the subject of general complaint. What therefore our fathers neglected to do for us, let us do for posterity, and not say with the splenetic Swift, we care not what becomes of posterity, when we consider from what monsters they are to spring; but rather let us say, the greater monsters the parents are, the more pains ought to be taken with the children, to prevent the contagion of their example.

The only men who in this country have attacked our system of education as erroneous in the whole, and all its parts, are Milton and Locke. In France, Rousseau, Condillac, and Condorcet, have likewise proposed different systems, but each of them is liable to great objections, and

what the latter has said of Condillac, may with equal propriety be applied to himself. Both Milton and Locke have suggested a mode of education essentially different from the present, though very opposite in their views. Milton formed his model on the ancient republics, of which he was from political prejudices an admirer. His system is censurable, because impracticable in the execution, unadapted to the state of Britain, and open to the objections made to the present mode, because it is too general and makes no provision for the different situations in life. His theory however is a noble one. Locke, in the opposite extreme, despairing of any amendment in our course of public education, formed his plan on the basis of domestic education. It is well calculated to make inoffensive men, but not active citizens; and this is the description of men most suited to our genius and policy, which require vigour and activity in all the members of the state. Experiments on this subject must not be rashly ventured upon; nothing can be advanced *a priori*; for want of experience, the greatest geniuses have been the greatest visionaries; laying schemes the least capable of being reduced to practice, or the most absurd if they *had* been put in practice.

From the defective state of public instruction, from the want of a proper medium between the education of the man of commerce (under which title, I include every person excepting our nobility, independent Commoners, the glory of this island, and those who are intended to pursue the professions of law, physic, and divinity) and an institute in the dead languages and in abstract science, we are in want of something liberal, worthy of the attention of gentlemen whose views require something above the education of the counting house, and below the prosecution of the learned languages.

It has been remarked above, that the cause of this defect, lies in the continuance of the same system, after the altered condition of society, renders it no longer necessary. The clergy, in former ages, engrossed the whole of human learning, and though their stock was not great compared with modern times, yet their plan of education, from its commencement at the grammar school, to its completion at the university, was subordinate to their professional views. If a few laymen offered themselves for education, it could not be expected that any provision should be made for their order. To the clergy alone, belonged the superintend-

ance of education, and as they had learnt nothing but the rhetoric, logic, and school divinity, or civil law, in which, during many centuries, all human learning was comprized, it is not likely they should have entertained larger or more liberal views of education; still less, that they should strike out a course of study, for the use of men who were universally thought to have no need of study; and of whom, few were so sensible of their own wants as to desire any such advantage.

Besides, in those days, the great end of human society seems to have been but little understood. Men of the greatest rank, fortune, and influence, who took the lead in all the affairs of state, had no idea of the great subjects of wise and extensive policy; and therefore, could never apprehend that any fund of knowledge was requisite for the most eminent stations in the community. Few persons imagined what were the true sources of wealth, power, and happiness in a nation. Commerce was little understood, or ever attended to; and so slight was the connection of the different nations of Europe, that general politics were very contracted. And thus, men's views being narrow, little previous furniture of mind was requisite to

conduct them. Nor again is it to be passed over insilence (says Lord Bacon, in his Advancement of learning) that the dedication of colleges and societies, only to the use of professory learning, has not only been an enemy to the growth of sciences, but has contributed likewise to the prejudice of kingdoms and states. Hence it is that princes, when they would make choice of ministers fit for the affairs of state, find about them a marvellous solitude of such men; for this reason, because there is no collegiate education designed to this end, where such as are framed and fitted by nature for that office, may, besides other arts, *study chiefly history, modern languages, books, and treatises of policy*; that so they may thence come more able and better furnished to the offices of state. The consequence was, that the advances, which were made to a more perfect and improved state of society were very slow; and the present happier state of things was brought about, rather by an accidental concurrence of circumstances, than by any efforts of human wisdom and foresight.

In the space of three centuries, what mighty changes have taken place in the world! The objects of human attention are prodigiously multiplied; the connexions of states are extended; a reflection upon our present advantages, and the

steps by which we have arrived to the degree of power and happiness we now enjoy, has shewn us their true sources; and so thoroughly awakened are all the states of Europe to a sense of their true interests, that we are convinced, the same supine inattention with which affairs were formerly conducted is no longer safe; and that, without superior degrees of wisdom and vigor in political measures, every thing we have hitherto gained will be infallibly lost, and be transferred to other nations. In this posture of affairs, more lights, and superior industry, are requisite to all persons who have any influence in schemes of public and national advantage; and consequently a different and a better furniture of mind, is requisite to be brought into the business of life.

The question therefore, which we should ask ourselves upon this subject, is, how can we most advantageously employ the fourteen years, that elapse between infancy and manhood? I answer, in the pursuit of such objects as may be useful to us in the particular employment of our riper years, and in the acquisition of such auxiliary knowledge, as may render us happy in ourselves, and families, and useful to our country.

To illustrate this proposition, we should observe, that every profession or pursuit has habits peculiar to itself, leaving some powers of the mind dormant, while it exercises and improves the rest. If we wish, therefore, to cultivate the mind to the extent of its capacity, we must not rest satisfied with that employment which its faculties receive from our particular situation in life. It is not in the awkward and professional form of a mechanic, who has strengthened particular muscles of his body by the habits of his trade, that we are to look for the perfection of our animal nature: neither is it among men of confined pursuits, whether speculative or active, that we are to expect to find the human mind in its highest state of cultivation. A variety of exercises is necessary to preserve the animal frame in vigor and beauty; and a variety of those occupations which literature and science afford, added to a promiscuous intercourse with the world, in the habits of conversation and business, is no less necessary for the improvement of the understanding. There are some professions, in which a man of very confined acquisitions may arrive at the first eminence; and in which he will perhaps be the more likely to excel, the more he has concentrated the whole force of his mind to one particular object.

But such a person, however distinguished in his own sphere, is educated merely to be a literary artisan, and neither attains the perfection, nor the happiness of his nature. That education only can be considered as complete and generous, which (in the language of Milton) fits a man to perform justly, skilfully, and magnanimously, all the offices, both private and public, of peace and war.

The foregoing observations are not meant to recommend an indiscriminate attention to all the objects of speculation and of action. Nothing can be more evident, than the necessity of limiting the field of our exertion, if we wish to benefit society by our labors. But it is perfectly consistent with the most intense application to our favorite pursuit, to cultivate that general acquaintance with letters and with the world, which may be sufficient to enlarge the mind, and to preserve it from any danger of contracting the pedantry of a particular profession. In many cases, the sciences reflect light on each other; and the general acquisitions which we have made in other pursuits, may furnish us with useful helps for the further prosecution of our own. But even in those instances in which the case is otherwise, and in

which these liberal accomplishments must be purchased by the sacrifice of a part of our professional eminence, the acquisition of them will amply repay any loss we may sustain. It ought not to be the leading object of any one, to become an eminent metaphysician, mathematician, or poet; but to render himself happy as an individual, and an agreeable, a respectable, and an useful member of society. A man who loses his sight, improves the sensibility of his touch; but who would consent, for such a recompence, to part with the pleasures which he receives from the eye?

If the business of education were more thoroughly, and more generally understood, it would be less necessary for individuals, when they arrive at maturity, to form plans of improvement for themselves. But education never can be systematically directed to its proper objects, till we have obtained, not only an accurate analysis of the general principles of our nature, and an account of the most important laws which regulate their operation; but an explanation of the various modifications and combinations of these principles, which produce that diversity of talents, genius, and character, we observe among men. To instruct

youth in the languages, and in the sciences, is comparatively of little importance, if we are inattentive to the habits they acquire ; and are not careful in giving to all their different faculties, and all their different principles of action, a proper degree of employment. Abstracting entirely from the culture of their moral powers, how extensive and difficult is the business of conducting their intellectual improvement ! To watch over the associations which they form in their tender years ; to give them early habits of mental activity ; to arouse their curiosity, and to direct it to proper objects ; to exercise their ingenuity and invention ; to cultivate in their minds a turn for speculation, and at the same time preserve their attention alive to the objects around them ; to awaken their sensibilities to the beauties of nature, and to inspire them with a relish for intellectual enjoyment ;—these form but a part of the business of education ; and yet the execution even of this part, requires an acquaintance with the general principles of our nature, which seldom falls to the share of those to whom the instruction of youth is commonly intrusted.—Nor will such a theoretical knowledge of the human mind, be always sufficient in practice. An uncommon degree of sagacity is frequently requisite, in order to accommodate

general rules to particular tempers, and characters.—In whatever way we chuse to account for it, whether by original organization, or by the operation of moral causes, in very early infancy; no fact can be more undeniable, than that there are important differences discernible in the minds of children, previous to that period at which, in general, their intellectual education commences. There is also a certain hereditary character (whether resulting from physical constitution, or caught from imitation and the influence of situation) which appears remarkably in particular families. One race, for a succession of generations, is distinguished by a genius for the abstract sciences, while it is deficient in vivacity, in imagination, and in taste: another is no less distinguished for wit, and gaiety and fancy; while it appears incapable of patient attention, or of profound research. The system of education which is proper to be adopted in particular cases, ought, undoubtedly, to have some reference to these circumstances; and to be calculated, as much as possible, to develope and to cherish those intellectual and active principles, in which a natural deficiency is most to be apprehended.

That there are important functions attached

to persons not exercising the liberal professions, and which require judgment, address, and great extent of information, cannot be disputed. In great cities, the combinations to which commercial speculations give rise; the various operations of certain trades in particular situations; the arrangements of municipal police, and numberless other local circumstances; demand, from their nature and complexity, much general knowledge, and no common share of penetration and acuteness. In the topography of Great Britain, we are often delighted with the frequent mention of individuals, who, after having pursued with credit and reputation, various lucrative professions, and often-times while in the actual pursuit of them; have turned aside from the labors of the counting house, to view the condition of society in their towns, to cause wholesome laws to be enacted for their government, to lay the bases of useful institutions, and to endow them with wealth, liberality, and magnificence. The absence of such characters, occasions a want of public spirit; while their presence and activity invigorate the public zeal of their fellow citizens, and often prevent from going to rust, or mouldering to decay, the useful monuments of early wisdom, and of primitive policy. Exertions which are directed

to the augmentation of public felicity, and to the diminution of individual wants, constitute the highest achievements of human glory, and rank the agents in the foremost of national benefactors. Because, their object, is not to confound selfishness with misguided piety, indolence with superstitious fears; but to hold out encouragements to habits of industry, and to assure support to unaffected pain, decrepitude, and want. Those days are no more, when the timid mind yoked under the thralldom of holy knavery, bequeathed the fair patrimony of whole families to lazy priests for the celebration of a mass, or the invocation of reputed saints amid the blaze of midnight tapers; those days of pious fraud are no more, when repentant sinners paid toll to the church, to be put into a shorter road to heaven; when deluded devotees bribed their way to the mansions of everlasting rest, by enriching with the spoils of a community, a lazy, vicious, and ignorant priesthood. By the help of a little reason, the human mind has burst its bonds, and discovered a safer and a cheaper route. After twelve centuries of subjugation to the most absurd and beastly extravagances that ever polluted and dishonored human reason, mankind have recognized that the nearest approaches to the Deity, are accomplished by an honest and dili-

gent pursuit of their several duties, and by the uninterrupted practice of all the moral virtues.

The events which have succeeded this belief, correspond with our best conceptions of human happiness. An immense monopoly of treasure in the hands of the indolent, has been diffused over the country, and consequently, industry became honorable. Those very hands which were falsely supposed to be continually uplifted to heaven, for the sake of the living and the dead, but which were commonly occupied in applying the goblet to their lips, or in gorging the appetite, were now employed at the plough, and other useful labors. The abbeys, monasteries, and religious orders were dissolved by the charm of one act of the legislature, and thousands and tens of thousands of pampered mendicants, were sent forth into the world, to partake of the labors, and to feel the sweets of society. From this æra, Britain arose in splendor: the condition of men was improved. Wealth was more generally circulated when impropriations ceased; and indolence and crime were less common, when industry was encouraged, and virtue found its reward. Extended commerce furnished the means of subsistence to thousands who before waited at the gates of

the monastery, and lived by the alms of rich beggars, or fed on the crumbs that fell from their tables. On the site of many an ancient pile of superstition are now seen vast manufactories, giving employment to a numerous commonalty, and inducing them into habits of discipline and industry. Science, at this time, fortunately freed from the nonsensical dogmas of the schools, kept pace with the national inclination, and perfected the first rude attempts of manufacture, and navigation. The sequel is well known. Great Britain acquired the sovereignty of the seas, and became the emporium of arts and commerce.

Nor let it be imagined, that in this description, I have withdrawn with a prophane hand, the veil which concealed from vulgar eyes, the ridiculous craft by which nations have been, and still continue to be depressed and enbruted. To point out to a more enlightened age, the causes of their forefathers' subjugation and poverty, is to guard them against indolence and superstition, two of the most baneful vices, that ever afflicted mankind. To exhibit the sources of their relative felicity, is to display the causes of national grandeur. If the order, the vices, and the sensuality of monks, have had a tenden-

cy to promote fanaticism, to engender crimes, to impoverish a nation, and to debase science; the establishment of a well regulated clergy, is calculated to support true religion, to foster learning, to cherish industry, and to circulate undefiled benevolence. Of the character of the former class, there are so many disgusting circumstances on record, that if we had not seen something similar in our times, we should scarcely be brought to credit them. But, in the sequel of this work, I shall have occasion to treat very largely on this subject. Let it suffice for the present, to take one example, from among the least of the charges that may be brought against them. In the time of Henry II. the monks and prior of St. Swithin, threw themselves, one day, prostrate on the ground, and in the mire (a swinish multitude) at the king's feet, complaining, with many tears and much doleful lamentation, that the bishop of Winchester, who was their abbot, had cut off three dishes from their table. "How many has he left you?" said the King. "*Ten only*," replied the disconsolate monks. "I myself" exclaimed the king, "never have more than three; and I enjoin your bishop to reduce you to the same number."

In his words, whose name rests unknown, but whose fame is immortal, I turn with pleasure from that barren waste, in which no salutary plant takes root, no verdure quickens, to a character fertile, as I willingly believe, in every great and good qualification. This is the British merchant, than whom, there is not in all society, a more useful or more honorable character, if, his counting house be not his God. When I consider the good the merchants of this country have already done, when I reflect on the extensive means they possess of doing more, when I contemplate the wide circuit of benevolence, which is within the rays of their power to reach, I am inclined, to ask of them, whether their education has been such, as to enable them to profit by the advantages of fortune and the acquisitions of industry? — to profit not themselves but their country, or rather to profit themselves through the exaltation of their country?

To furnish the means of procuring well appointed armies and navies, is commendable in times of war; but men are not destined to be perpetually engaged in scenes of contention and blood. War is a contingent evil, peace is a permanent good. The opportunities of lei-

sure, cannot therefore be better employed, than in devising measures, by which the latter may be maintained in honor, comfort, and security. But these benefits are not to be expected from men, whose education restricts them merely to the pursuits of sordid gain. At this time, I might mention the name of an individual, who, by correct speculation, and patient perseverance has in the course of a few years, transformed a rude waste, into a pleasant town, where a numerous population is sustained, by the useful manufactures which his genius and munificence have raised.

The connection between knowledge and wealth in extending power and felicity, was never more strongly illustrated than in the case of the Medici; whose fame was spread throughout every part of the world for learning and riches, both of which they employed to the noblest and most useful purposes. The power of ignorance, which had prevailed for many centuries, was but weakly attacked by Petrarch, Boccace, and others, till Cosmo and Lorenzo di Medici with the power of Florence, restored to Italy the politer arts of the ancients. They first opened the way for the return of good taste, by the encouragement which they gave to the

refugees of Greece, by inviting them to Florence after the conquest of Constantinople by the Turks, and by procuring from the favor of Bajazet, out of the ruins of that desolated city, many of the precious morsels of Grecian literature. Under the patronage of Cosmo, and of his grandson Lorenzo, these learned men of Greece taught their native language, hitherto unknown in the western parts of Europe, and made the Italians acquainted with Homer, Aristotle, and other eminent poets and orators of ancient Greece. So great was their success, that five hundred young nobles and gentry, resorted at a time for instruction to the school of Politian. Painting, sculpture, and architecture, which had been received a little before, were now brought to great perfection, by the application of artists to the study of the *antique* in their statues, and basso-relievos.

This homage of modern nations to the superior genius of Greece, while it proves the ascendancy of the former in taste, evinces that a true knowledge of the politer arts cannot be obtained, without a perfect acquaintance with their excellencies. This is at least certain, that there never was in any nation, a great poet, painter, or statuary, who had not some know-

ledge of the antique; and the principal faults of that great and wonderful genius in painting, Reubens, are entirely owing to his great neglect of the ancients.

To conclude this chapter, I shall point out some of the duties which the middling classes are bound to fulfil, from the contemplation of which, we shall be enabled to deduce powerful supports in favor of a more improved mode of education. These duties are either political or relative. Political duties or offices, involve the greatest interests of humanity, freedom and justice. They include their choice of those who are to represent, and to legislate for them in Parliament—their obligation as jurors to decide on the lives, liberties, and properties of their fellow citizens. In the capacity of freeholders, they have often the power of influencing by their presence and votes, those occasional meetings in their counties, where measures of public economy are debated, and where men assemble not to legislate, but to instruct their legislators; to applaud them when they do right, to remonstrate with them when about to purpose wrong. To exercise these rights with unadulterated patriotism, and to perform these duties with propriety, cannot be hoped, without some

previous attention to studies, on which the objects of such meetings are founded. They are much mistaken, who indolently imagine that the functions of a magistrate, are to be found exclusively in Burn's Justice, or in Dalton's Sheriff. Those performances are admirable in nature and execution, replete with sound law, and arranged with nice perspicuity: but to prove more fully their incompetence to all the liberal objects which should occupy the mind of a gentleman, and to draw more accurately the distinction between the servile routine of practice, and the enlarged conceptions of general policy, the multifarious poor laws, obscured with clouds of legal sophistry, the police of prisons, the penal laws, the employment of convicts in public works, in the repair or construction of roads and bridges—these alone, involve considerations, which require much experience of men and things. On all these subjects, they have been addressed with such persuasive arguments by Blackstone in his introductory lecture on the study of the laws and constitution, that it will be unnecessary to recapitulate in this place, what is familiar to every one. There is, however, one fact, noticed by that able commentator, and by many other constitutional writers, which must not be suffered to es-

cape unnoticed. To the scandalous ignorance of jurors, they ascribe that increased power of interpretation and direction of law, which has silently lapsed into the hands of the judges. Nor are there wanting many enlightened persons who have given it as their decided opinion, that in all matters of property, they would rather entrust their cases to the wisdom and discretion of a judge, than to the chances of an unlettered jury. And much as I estimate the glorious institution, I cannot avoid assenting to their proposition; for, it is impossible that men who are ignorant of the distinctions between right and wrong; who have no correct notions of the principles of jurisprudence, of property, and of moral obligation, can be fit to decide as judges on the disputes of their countrymen. Indeed, if I have rightly calculated the relative value of money at the time when the act of the legislature determined the qualification of the juror, and its valuation at the present time, and duly compared it with the condition of men then and now, I am justified in asserting that the form of the law has been strictly, too strictly attended to, while its spirit and wisdom have been disregarded.

Having already treated of relative duties, and

established the grounds on which a meliorated system of education, is become desireable, I shall proceed to lay down a regular course of instruction, which comprehends the whole period from infancy to manhood. In consequence of the foregoing principles, the learned languages are not included in this syllabus, as a *necessary* part of the education of those not destined to the higher walks of life, or to the pursuit of the learned professions. It is proposed no longer to waste several of the precious years of youth, in a grammar school education, where Latin and Greek absorb the whole of their studies, when there are so many obvious and more important objects to which they should apply themselves. Men who have been trained in the old system, are more to be pitied than censured, because it is not always owing to moral inactivity, or to dissipated manners, that time weighs heavily on them, and fosters ignorance. Having never been encouraged to apply themselves to those pursuits which related to their condition, and which therefore, might be useful to them hereafter, we cannot be surprized that they feel an unconquerable aversion to follow any kind of reading, when they suspect that as knowledge depends on the education of the grammar school which they have

forgotten, it is therefore useless to commence at years of maturity any sort of studies. Hence ensues that mental desperation, which drives so many rational characters to the tavern; or into insipid society, where nothing is contracted but disease, and nothing learnt but scandal. To such men, it may afford some consolation to know that the principle is false, and the practice, a source of errors. There are few individuals, whose education has been conducted in every respect with attention, and judgment. Almost every man of reflection is conscious, when he arrives at maturity, of many defects in his mental powers, and of many inconvenient habits, which might have been prevented or remedied in his infancy or youth. Such a consciousness is the first step towards improvement; and the person who feels it, if he be possessed of resolution and steadiness; will not scruple to begin, even in advanced years, a new course of education for himself. The degree of reflection and observation, indeed, which is necessary for this purpose, cannot be expected from any one at a very early period of life, as these are the last powers of the mind which unfold themselves; but it is never too late to think of the improvement of our faculties; and much progress may be made, in the art of

applying them successfully to their proper objects, or in obviating the inconveniences resulting from their imperfections, not only in manhood, but in old age.

Of the ensuing plan, it will be necessary to premise only a few words. It endeavors uniformly to keep pace with the orderly progress of man, and every successive study is supported on the basis of that which preceded it. Hence the powers of the understanding gradually unfold themselves, and every science which is embraced, being within the compass of the student's faculties, serves as a light to direct him in his future progress. The several studies proposed, are accompanied with remarks where they have been thought necessary, and the books which are recommended, are by no means designed to exclude more scientific and popular works, which may not come within the author's reading, but to point out certain ones appropriate to the subject, in order that the readers mind may not be kept wavering, nor the plan itself rendered doubtful, from the want of adequate materials.

CHAP. V.

*Plan of a Public Elementary School.*

ACCORDING to the population of the county, let there be in every town, a public school, divided into two large rooms, one to be called the Lower, and the other to be called the Upper Academy. Over each academy, let there be one head Master, whose office should consist in lectures and examinations. Let proper assistants be provided according to the ratio of one to twenty scholars; or, if there be above twelve scholars, then one assistant, if above thirty, and under forty, two, and so on in proportion. Their business should be confined to the conduct of the mechanical part of the school, such as the distribution of the separate portions of study, attention to the rehearsals of the boys, and expositions of the difficulties that may impede their progress. Every one will anticipate me in the remark, that their moral character should be blameless, their tempers ob-

ling, and their knowledge as far, at least, as concerns their academical duties, solid and communicative. The Head Masters, should be profoundly learned in those studies, which belong to their several departments, and which, as they arise progressively under our consideration, will point out their necessary qualifications. Of the assistants, I shall take the liberty of proposing some observations, which are new to the generality of parents.

Young men of amiable and polite manners should be preferred to more aged though better informed preceptors; because, it is unnecessary that their talents should be much above mediocrity, for the purpose of instructing boys in the first elements of knowledge. Nor indeed, will men of superior talents be readily found to stoop to the drudgery of a school; conceiving their time mispent, they are apt, on such occasions, to be negligent of their tender pupils, and to display all the petulance of acknowledged superiority. Confidence cannot well exist in the midst of such disparity; the natural timidity of youth revolts at austere manners. But mediocrity approaches nearer to their own condition, and consequently, assimilates better with their understandings. Hence nothing is more frequent

in great schools, than to see younger boys apply to their seniors for information, and I have so often known it to be kindly administered, and gratefully received, that I entertain no doubt whatever of the expediency of my proposition. Boys always enjoy more their moments of recreation and sport in the society of each other, than when they are under the magisterial eye of their preceptor. In fact, the amusements of infancy and age are so dissimilar, and their studies so opposite, that it is very natural to youth, to associate the same ideas of severity in the one, that they commonly entertain of impropriety in the other. He who has learned any thing in a clear and methodical manner, and has attained a distinct perception, and an ample survey of the whole subject, must have rendered it familiar to himself by frequent meditation, reading, and occasional discourse; consequently, he is better able to represent it to the learner in all its views, with all its properties, relations and consequences. He knows which view of the subject to recommend to his disciple, and how to propose to his understanding that part which is easiest to apprehend, and most likely to allure and assist his further inquiry. But, says Dr. Watts, it is not every one who is a great scholar that always becomes the happiest teach-

cher, even though he may have a clear conception, and methodical as well as an extensive survey of the branches of any science. He must also be acquainted with words, as well as ideas, in a proper variety; that when his disciple does not receive the ideas in one form of expression, he may change the phrase into several forms, till at length he strikes conviction on the understanding, and enlightens it in the just idea of truth. He must therefore have patience to bear with slowness of perception, or want of sagacity in some learners; and a persuasive method of insinuating knowledge into those who are willing and diligent in the search of it, as well as reclaiming those who are wandering into error. It is not enough to be skilled in the sciences which they profess to teach; they should also be skilled in the method of teaching them. The Socratical method of disputation is a very agreeable and elegant mode of leading persons into the knowledge of any particular truth, and therefore it may occasionally be resorted to by the tutors. But the most excellent and efficacious means of enlightening the mind, is by reading or delivering lectures to the pupils; and therefore, the following observations, with which I shall conclude my remarks on the choice and functions of tutors,

will serve as proper directions for their guidance in this method of instruction.

Let a well written book be selected, which contains a short scheme or abstract of the science to be taught. If such a treatise be not already written, let the tutor compose an abstract of the science himself, containing its most substantial and important parts, disposed in such a method as he best approves. Let a chapter or section of this be read daily by the learner, on which the tutor should paraphrase in the following manner: he should explain both words and ideas more largely, and what is dark and difficult should be opened and illustrated, partly by various forms of speech, and partly by apt similitudes and examples. Where the sense is dubious, it must be fixed and determined: where the arguments are strong and cogent, they should be enforced by some further paraphrase, and the truth of the inferences should be made apparent. Where the arguments are weak and insufficient, they should be either confirmed or rejected as useless; and new arguments should be added to support that doctrine. What is treated very concisely should be amplified, and where several things are laid closely together, they must be taken to pieces

and opened by parts. Where the tutor differs from the author, he should point out and confute his mistakes. The most necessary, the most remarkable and useful parts of a treatise, or of a science, should be peculiarly recommended to the attention of the pupils, and pressed upon them to retain it in memory; and what is unnecessary or superfluous should be distinguished, lest the learner should spend too much time in the more needless parts of a science. The various ends, uses, and services of that science, or of any part of it, should be declared and exemplified, particularly in mathematics and natural philosophy; and if there be any remarkable beauties or defects in the style of the writer, the tutor should make a just remark upon them. While he is reading and explaining any particular treatise, he may compare the different editions of the same book, or different writers upon the same subject: he should inform them where that subject is treated by other authors, which they may peruse, and thereby lead them to a further elucidation, confirmation, or improvement of that theme of discourse in which he is instructing them. It is alluring and agreeable to the learner, to be occasionally entertained with some historical remarks, useful stories, or any occurrences, which the tutor

has met with, relating to the several parts of such a science, provided such circumstances have no tendency to make him neglect to give his pupils a solid and rational information of the theme before them. Teachers should endeavor, as far as possible, to join profit and pleasure together, and mingle delight with instruction; but at the same time they must be guarded, lest they merely amuse the ear and gratify the fancy, without enriching the minds of their pupils. In reading lectures of instruction, let the teacher be very solicitous that the learners comprehend his meaning, and therefore he should frequently inquire, whether he expresses himself intelligibly, whether they understand his sense, and take in all his ideas, as he endeavors to convey them in his own forms of speech. It is necessary that he who instructs others, should use the most proper style for the conveyance of his ideas into the minds of those who hear him; and though in teaching the sciences, a person be not confined to the same rules by which we must govern our language in conversation, for he must necessarily make use of many terms of art and hard words, yet he should never employ them merely to display his learning, nor affect sounding language without necessity. Before he reads a following

lecture to his pupils, he should run over the foregoing lecture in questions proposed to them, and thus acquaint himself with their daily proficiency. It is in vain for the learners to object, that they came to be taught, and not to be catechised and examined; for, it is impossible for a teacher to proceed in his instructions, if he know not how far the learner imbibes and remembers what he has been taught. It is sloth, real ignorance, incapacity, or unreasonable pride, that induces a learner to refuse to give his teacher an account how far he has profited by his last instructions. For want of this constant examination, young men have spent many idle and useless years, even under the daily inspection and labors of learned teachers; and they have returned from the academy without the acquisition of any one science, and even with the shameful loss of the classical learning, which they had acquired at the grammar school. Let the teacher always accommodate himself to the genius, temper, and capacity of his pupils, and practise various methods of prudence to allure, persuade, and assist every one of them in their pursuit of knowledge. Where the scholar has less sagacity, let the teacher enlarge his illustrations; let him discover where the scholar finds a difficulty, and thus let him

help the laboring intellect. Where the learner discovers a forward genius, and a lively curiosity by frequent inquiries; let the teacher oblige such an inquisitive mind by satisfying those questions; and where those inquiries are unseasonable, let him not silence the young inquirer with a magisterial rebuff, but with much candor and gentleness, postpone those questions, and refer them to a proper hour. Curiosity is an useful spring of knowledge; it should be encouraged in children, and awakened by frequent and familiar methods of conversation with them. It should be indulged in youth, but not without a prudent moderation; in those who have too much, it should be limited by a wise and gentle restraint or delay, lest by wandering after every thing, they learn nothing to perfection. In those who have too little, it should be excited, lest they grow stupid, narrow-spirited, self-satisfied, and never attain a treasure of ideas, or an aptitude of understanding. If therefore there be any uncommon phenomena occur in the natural, moral, or political world, let them be explained; if rare birds and beasts be shewn in a town, or if any extraordinary piece of mechanism be exhibited, or a review happen, let them go; or when there is a public trial of criminals, or when any an-

cient ceremony or custom be celebrated, let them not be excluded from the spectacle. Let not the teacher demand or expect things too sublime and difficult from the humble, the modest, and timorous disciple : and where such an one gives a just and happy answer, even to plain and easy questions, let him have words of commendation ready for him. Let him encourage every spark of kindling light, till it grow up to bright evidence and confirmed knowledge : When he finds a boy pert, positive and presuming, let no blow be given, but let the tutor take every just occasion to shew him his error ; let him set the absurdity in complete light before him, and convince him by a full demonstration of his mistake, till he sees and feels it, and learns to be modest and humble. Let Chesterfield's letters be put into the hands of every pupil. A teacher should not only observe the different spirit and humor among his scholars, but he should watch the various efforts of their reason, and the growth of their understandings. He should practise in his young nursery of learning, as a skilful gardener in his vegetable dominions, and apply prudent methods of cultivation to every plant. Let him with a discreet and gentle hand prune the irregular shoots, let him guard and encourage the tender bud-

things of the understanding, till they be raised to a blossom. The tutor should take every occasion to instil knowledge into his disciples, and make use of every occurrence in life, to raise some profitable conversation upon it; he should frequently inquire something of his pupils, that their young reason may be set to work, to form inferences, and to draw one proposition out of another. Reason being that faculty of the mind which he has to deal with in the pupil, let him endeavor by all proper and familiar methods to call it into exercise, and to enlarge its powers. He should take frequent opportunities to shew them when an idea is clear or confused, when the proposition is evident or doubtful, and when an argument is feeble or strong. And by these means their minds will be so formed, that whatever he proposes with evidence and strength of reason, they will readily receive. He should by all means make it appear that he loves his pupils, and that he seeks nothing so much as their increase of knowledge, and their advancement in all valuable acquirements: this will engage their affection to his person, and procure a just attention to his lectures.

THE UNDER ACADEMY.

No boy should be admitted until he can read with tolerable facility, which may be accomplished at a very early age if parents be mindful of their duty. It would have been fortunate, if, in the formation of our alphabet, there had been no more letters than are necessary to distinguish the various sounds in the language. By such a reduction of the number of those letters which have too great a similarity, the orthography and pronunciation would have been rendered more easy and comprehensive. To obviate this inconvenience as much as possible, a child should be taught by proper examples, to distinguish all the letters even before he can properly pronounce any one of them; and after he has learned the letters, and begins to articulate, he should be taught to distinguish the sounds of the vowels and consonants, whether simple or compound, and to divide the syllables of a word, as it is pronounced, which is the easiest and most obvious mode.

An unnatural elevation or depression of the voice, an indistinct articulation, and a corrupt or provincial dialect, are the three principal defects of English readers: for lisping, which is the pronunciation of the letter S or Z, or C before E and I, as though it were T H, may be effectually remedied by selecting words where the letter S prevails, and pronouncing them with the teeth shut close, at the same time observing never to put the tongue between the teeth, except when *th* occurs. Stammering is easily cured, by causing a child to speak very slowly and without fear. The first of the defects above mentioned, destroys whatever is graceful and beautiful in pronunciation, and whatever is various and energetic in discourse. To avoid it, a boy should be persuaded to read as he speaks, in order to preserve the natural key of his voice, which practice, will qualify him as occasions require, to raise or depress, to vary or modulate it. What can be more fatiguing to the reader, or more ridiculous and disagreeable to the auditor, than the following pathetic sentence from Thompson, delivered in an immoderately loud or overstrained voice.

Unpitied, and unheard, where misery moans;
Where sickness pines; where thirst and hunger burn,
And poor misfortune feels the lash of vice.

The following energetic passage from Milton, would be completely laughable if delivered in the same languid tone as the preceding.

———Back to thy punishment,

False fugitive, and to thy speed add wings,

Lest with a whip of scorpions I pursue

Thy lingering, or with one stroke of this dart

Strange horrors seize thee, and pangs unfelt before.

The second defect, which consists in confounding the words, and in drawing one sentence upon another, by which it is either impossible for the hearer to comprehend, or an attention is exacted from him too close to be long observed without pain and difficulty; is to be prevented by making a boy pronounce distinctly, but not slowly, every significant syllable; by causing all the stops or pauses to be observed; and by placing on the proper syllable, the stress of the voice or syllabical accent, and on such particular words or portions of the sentence as the subject demands, the proper emphasis or oratorical accent. In narrative, boys are apt to fall into monotone, which may be easily avoided by rightly accenting the proper syllable; this communicates a surprizing spirit and vivacity, as well as a proper distinction to words. If the following words were pronounced as they

are accented, (popular, vivacity, conséquence) some time would elapse before the hearer could recognize them. I was once witness of a ludicrous circumstance of this sort while at college. A certain doctor of divinity who was at the same time, a man of taste, politeness and unexceptionable character, was reading the second lesson in which were these words—"Saul, Saul, why persecutest thou me"? It happened that the sun shone full in his face at the time, and as he pronounced the words in the Lancashire dialect, and in a sharp tone, as if spelt thus—"Sol, Sol, why persecutest thou me"? The association which it raised in our minds between the ever memorable instant of the conversion of the great apostle of the Gentiles, and the master of a college, tormented by the sun-beam produced such an instantaneous effect, that several of us burst into a loud fit of laughter.

The distinction that accent gives to syllables, emphasis gives to words. In the first line of the celebrated soliloquy of Macbeth, the emphasis can be varied four times according to the supposed state of the speaker's mind, and every variation of the emphasis gives a different meaning to the question. In the brief interrogatory, Do you walk to town to day? five answers may

be given directly. If we exert our voice on the pronoun, and say, "Do *you* walk to town to day?" the answer might be, "No, but my servant does." If it be said, "Do you *walk* to town to day?" it may be answered, "No, I shall ride." Let the question be, "Do you walk *to town* to day?" the answer if negative, may be, "No, I shall go down into the country." Lastly, if we were asked, "Do you walk to town *to day*?" we should perhaps answer, "No, but I shall to-morrow." Again, let the emphasis be twice applied, "Do you *walk* to town *to day*?" and an answer containing a double emphasis may perhaps be requisite; "No, I shall *ride* thither *to-morrow*." And if the same words were addressed to us without any emphasis on the part of the speaker, we should be at a loss what to answer, because his meaning would appear ambiguous.

In the lectures on elocution which have been published by Mr. Sheridan, he very properly observes that the rule of throwing the accent as far back as possible, is absurd and pedantic, and if I remember rightly, he illustrates this position by several striking examples. He remarks respecting emphasis, that in the play of Macbeth, there is a passage which, as it has

been generally spoken on the stage, and read by most people, is downright nonsense ; but in itself is a very fine one, and conveys an idea truly sublime. It is the expression of Macbeth after he has committed the murder, when he says,

Will all great Neptune's ocean wash this blood
Clean from my hands? No—these hands will rather,
The multitudinous sea incarnardine,
Making the green one, red.

Now the last line pronounced in that manner, calling the sea, the green one, makes nonsense of it. But if we read it with proper emphasis and stop, and say, make the green—*one red*; here is a most sublime idea conveyed, that his hands dipped into the sea, would change the color of the whole ocean from green to red. Nor if we consider the disturbed state of his imagination at that time, will this thought, hyperbolical as it may seem at first view, appear at all unnatural. For it is highly probable that his fancy at that instant presented all objects about him as of that sanguine hue ; nay converted the very atmosphere that surrounded him, into a sea of blood.

Perhaps, no better admonition can be given on the subject of reading, than the memorable

answer of Betterton to the Bishop of London, who inquired of him, "what could be the reason that whole audiences should be moved to tears, and have all sorts of passion excited, at the representation of some story on the stage, which they knew to be feigned, and in the event of which, they were not at all concerned; yet that the same persons, should sit so utterly unmoved, at discourses from the pulpit, upon subjects of the utmost importance to their temporal and their eternal interests?" He received this memorable reply, "My Lord, it is because we are in earnest."

Lastly, as a provincial dialect betrays an evident defect of instruction in the early part of life, confirmed by long habit, every possible attention should be given to remedy this article. It is a remarkable fact, to which I have paid particular attention, both here and abroad, that the fair sex deliver themselves with far more correctness and purity than we do. The fact itself I am not able to resolve into any general principle, unless it be ascribed to that spirit of imitation, in which they excel, and to the refined taste which that spirit is calculated to excite. The Athenians (and the French, who in many respects resemble them) were particularly care-

ful of their mode of pronunciation. It is reported by Quintilian, though I cannot immediately point to the passage, that one of the most elegant writers of Greece, experienced a severe mortification from a fruit woman of Athens, whose commodities he was endeavoring to cheapen. She replied "*Stranger* I can take nothing less." Struck with astonishment he inquired her meaning, when he was answered that he did not pronounce a certain word according to the Attic dialect. The young people of Athens, were sent first to learn grammar, under masters who taught them regularly their own language; by which they attained a knowledge of its whole beauty, energy, number, and cadence. In short, to speak English well, a person should speak in such a manner that no one should discover whether he be a native of London, Edinburgh, or Dublin. Sheridan's Dictionary appears to me to be the most useful work on this subject, and preferable to Walker's Dictionary.

The rules above established cannot fail to operate successfully if applied with care. At this time the nature and application of the pauses should be explained, to relieve the reader or speaker, to preserve the cadence of the voice,

to convey the true sense of what is spoken, and to give time for the recollection of the auditors. Books are very often improperly punctuated, which must lead to many inconveniences, unless the readers enter so fully into the sense of the author, as to make his sense their own.

These are the principal objects, to which the tutor should direct his attention in the instruction of the boys of the first class; and in his choice of the books for this purpose, he must exert his judgment as well as his taste. The contemptible trash put into the hands of children under the name of fairy tales, has a tendency to corrupt the fancy, to confound the judgment, and to lay the basis of those absurdities and airy castles of which thousands complain in more advanced age, and which perhaps were never better displayed, than in the tale of Rasselas Prince of Abissinia. Nothing should be inculcated in the minds of children but TRUTH, consequently they should be informed that even fables are merely allegories, meant to convey a moral lesson under the assumed characters of birds and beasts.

The boys of the first division of the first class, should confine their pursuits entirely to reading

and to principles of general grammar, which should be delivered to them in a familiar manner by the tutor. While every attention is paid to their mode of speaking, every breach of grammar, should be instantly corrected, and the reasons of the correction fully assigned. Hence it is evident, that while each lesson is repeating, the scholar will be gradually inducted into the first elements of grammar, the continued practice of which, cannot fail to invite his curiosity when he is advanced into the higher classes, and finds that the rules it prescribes have been already anticipated. Men spoke long before they formed the idea of reducing speech to general rules, and the same observation which induced the necessity of arranging words and generalizing our ideas, in an earlier stage of society, may be applied to civilized man during his infant state. An early habit of speaking with correctness, is the only efficient method of surmounting every difficulty in the study of the more abstruse parts of grammar. At this period of life, the memory is entirely at our service, and it improves by exercise ; we should therefore daily avail ourselves of it, as the understanding begins to open, in the elucidation of the rules of syntax. But the stupid custom of turning verse into prose, or examples of bad

English into good, is calculated only to vitiate the taste, and to serve as an apology for the indolence or neglect of preceptors. To point out as we proceed, the various elegancies of language, is far more conducive to mental improvement; and this is another motive with me for not proposing Latin to boys at so early an age, its genius being so totally different from our own. What can be more inelegant, and in some instances, more ungrammatical, than a literal translation of Latin into English? Even the best scholars are often at a loss to give a tolerable version of some of the most admired sentences of the Roman classics.

By instructing the boys of the first or lowest class the rudiments of English grammar, we take the shortest method of improving their understandings, because knowledge is communicated with more ease in their native than in a foreign language, which it is confessed requires several years attention, before it is thoroughly known. Books of morality and entertainment are most proper to be used on this occasion, as the deepest impressions of the former are likely to be made at their age, and their minds may be unbent by the latter. If some of our best and most innocent novels were put into a new

dress, and written in an easy, correct style, they would prove not only great allurements to an habit of reading, but wonderfully enlarge the imagination, and exercise the nobler faculties. This practice is much recommended by Milton, and he professes to have derived great benefit from it. I would therefore recommend for the serious portions of their reading, selections from our most chaste periodical papers, such as the *Spectator*, *Rambler*, *Adventurer*, *Guardian*, and *Observer*: and as several essays on various branches of morals are treated of in these works, those which are on the same subject should be classed together, and the tutor should carefully point out the varieties in their sentiments and diction; he should teach them to discriminate between the pompous verbosity of Johnson, and the harmonious cadence of Addison, between the stately sententiousness of Hawksworth, and the lively elegance of Cumberland.

Not less judgment is necessary in the choice of their books of entertainment, of which there are two sorts, the serious and the comic. Of the former, I should recommend before all others, the valuable and most interesting narrative of *Robinson Crusoe*; which the most rigid

moralist must acknowledge to be one of those novels, that may be read not only with pleasure, but also with profit. We find nothing in this novel of frisky passions, love-sick gallants, and swooning school girls; contemptible nonsense that is as good food for a vacant mind, as gingerbread for an empty stomach; on the contrary, the moral of Robinson Crusoe is founded on a more prevalent passion than love, the desire of self-preservation; and therefore it is certain of engaging the curiosity of old and young, learned and unlearned, male and female. It breathes throughout a spirit of piety and benevolence; it sets in a very striking light, the importance of the mechanic arts, which they, who know not what it is to be without them, are so apt to undervalue: it fixes in the mind a lively idea of the horrors of solitude, and, consequently, of the sweets of social life, and of the blessings we derive from conversation and mutual aid: and above all it shows, that by laboring with one's own hands, one may secure independence, and open for one's self many sources of health and amusement. Rousseau considers it as one of the best books that can be put into the hands of children: the style is plain, but not elegant, nor perfectly grammatical: and the second part of the story is tiresome, for which reason, I

should advise them to read the part which relates to the desert island, and leave off when Crusoe returns to Europe.

There is another circumstance relating to this work, which renders it doubly interesting: its historical arrangement is founded on a fact. For one Alexander Selkirk, a Scotch mariner, was left by accident, in the uninhabited island of Juan Fernandes in the South seas. There he continued four years alone, without any other means of supporting life, than by running down goats, and killing such other animals as he could come at. To defend himself from danger during the night, he built an house of stones rudely put together, and so very small, that one person could with difficulty crawl in, and stretch himself at length. It was extant when Anson arrived there. Selkirk was delivered by an English vessel, and returned home. A French writer says, he had become so fond of the savage state, that he was unwilling to quit it. But that is not true. The French writer either confounds the real story of Selkirk with a fabulous account of one Philip Quarl, written after Robinson Crusoe, of which it is a paltry imitation; or wilfully misrepresents the fact, in order to justify, as far as he is able, an idle con-

ceit, which, since the time of Rousseau, has been in fashion amongst infidel and affected theorists on the continent and fatally imported into this country, and accredited here by their proselytes, that savage life is most natural to us, and that the more a man resembles a brute in his mind, body, and behavior, the happier he becomes, and the more perfect.—Selkirk was advised to get his story put in writing, and published. Being illiterate himself, he told every thing he could remember to Daniel Defoe, a professed author of considerable note; who, instead of doing justice to the poor man, is said to have applied these materials to his own use, by making them the groundwork of Robinson Crusoe; which he soon after published, and which, being very popular, brought him a good deal of money.

There is another celebrated performance generally put into the hands of young people, the object of which is rather to astonish the reader, than to remind him of his moral duties, or to improve him in the knowledge of nature. It is commonly called *The Arabian Nights Entertainment*: whether it be really a translation from the Arabic original, or invented by Mons. Galland himself, has not yet been satisfactorily

ascertained. Certain it is, that the Caliph of Bagdat, and the Emperor of China, are addressed in the same terms of ceremony, which were usual at the late court of France. This diminishes the value of the work, because we expect eastern manners in an eastern tale, not the fashionable forms of Parisian civility. The leading characteristics of this work are, great luxury of description, and great variety of invention ; but neither elegance, sublimity, nor affecting sentiment. All is wonderful and incredible : every thing is carried on by enchantment and prodigy : every thing that is beautiful and simple in nature and art, gives way to the description of luxurious sensuality and magnificence—to rich robes, gaudy furniture, sumptuous entertainments, and palaces shining in gold, or sparkling with diamonds. The only circumstances which entitle the work to a perusal, are, its conveying a pretty just idea of the government, and some of the customs of eastern nations. But these are not of sufficient weight to warrant us in recommending it to the young. The voyages of Sindbad were certainly attended to by the author of Gulliver's travels.

Tales in imitation of the Oriental have often

been attempted by English, and other European authors: who, together with the figurative style, and wild invention of the Asiatics (which, being extravagant, are easily imitated) endeavor also to paint the customs and manners of that people. They give us good store of gold and jewels; eunuchs, slaves, and necromancers in abundance; their personages are all Mahometan, or Pagan, and subject to the despotic government of Caliphs, Visirs, Bashaws, and Emperors; they drink sherbet, rest on sophas, and ride on dromedaries. We have Chinese Tales, Tartarian Tales, Persian Tales, Mogul Tales, and Tales of the Fairies and Genii, all of them nearly on a level, and for ever to be shunned, in a system of education. We have however, some oriental stories which I would strongly recommend to be read by young persons. In the *Spectator*, *Rambler*, and *Adventurer*, there are many fables in the eastern manner; very pleasing, and of a moral tendency. *Rasselas*, by Johnson, and *Almorán and Hamet*, by Hawkesworth, are celebrated performances in this gout. The former is admirable in description; and in that exquisite strain of sublime morality by which the writings of this great and good man are so eminently distinguished: of the latter, the style is rhetorical and solemn,

and the sentiments are in general good, but the plan is obscure, and so contrived as to infuse perplexing notions of the divine providence; a subject, which the elegant writer seems to have considered very superficially, and very confusedly, as appears by his preface to his voyages.-- Addison excels in this sort of fable. His vision of Mirzah, in the second volume of the *Spectator*, is a masterpiece of this kind, uniting the utmost propriety of invention with a simplicity and melody of language, that melts the heart, while it charms and soothes the imagination.

The Pilgrim's Progress, written by the unlettered John Bunyan, is another work that is very often and very improperly committed to young people, for the improvement of their minds. The work itself, critically speaking, is a religious absurdity, highly fanatical, and replete with erroneous theological notions. The author certainly possessed to an high idea the talent of invention, and some of his allegories are well contrived; but the dialogue is low and vulgar, the style rude and even indelicate. To those, however, who have attained to years of maturity, who have feasted on Cervantes, and laughed with Butler, and who are disposed to have a relish of pious nonsense, and to wade through

a slough of holy mire by way of a change, the long and perilous journey of Christian will afford many instances of diversion and merriment.

The remaining works, of an entertaining nature which I would recommend to the boys of this class, are the novels of Marivaux, and *Gil Blas* by Le Sage. These authors abound in wit and humor; and give natural descriptions of present manners, in a simple, and very agreeable style. Their works may be read without danger, being for the most part of a moral tendency. Le Sage appears to have had a partiality for cheats and sharpers; for, these he often introduces, nor does he always paint them in the odious colors, that properly belong to such pests of society. Even his hero *Gil Blas* he has made too much a rogue; which, as he is the relater of his own story, has this disagreeable effect, that it conveys to us all the while we read him, an idea that we are in bad company, and deriving entertainment from the conversation of a man whom we cannot esteem.

As the lowest division of the first class should be engaged exclusively in the study of their own language, diversified occasionally by the perusal of the authors above cited; they must

in a very short time acquire not only a correct ear for the excellencies of composition, but an improving judgment on the manners of men. While they continue occupied in these pursuits, the tutor should, at least, once a day, lecture them on the analysis of language. They should be instructed in the most probable solution of the origin and progress of language; and I am persuaded, *from my own experience*, that if the lecture be ably adjusted and accommodated in proper terms to their understandings, that the imaginary abstruseness of grammatical researches, will become familiar to their minds. To learn the rudiments of grammar by rote, is not the way to understand grammar. The mind must be addressed and convinced. Of what use is it to vex a boy's memory with the definition of a noun, when the definition itself is not clear to his understanding? We may as well shew him the figure of a triangle on paper, and expect him to comprehend its nature, by a definition of its properties. The fact is, the tender mind is not capable of abstract reasoning; consequently, every subject that implies the generalization of ideas, should be first unfolded by evident and palpable demonstration. Thus, a boy is taught in our schools to gabble that "a noun is the name of any person, place, or thing, as John,

London, Honor;" yet, I will venture to assert, that not one in ten thousand comprehends what he says. I have before observed in page 85, that an analysis of language was never formed, until men were enabled to observe the turns of language which custom authorized; that there were poets and orators before a grammar was ever thought of; that it would be useless to teach either systems of rhetoric or composition to a child, who had not learnt by frequent use, the proper idioms of his own language; and that therefore the best models of beautiful writing should be set before him, previous to his being brought to judge of them by any determined rules. This is precisely the principle which should be pursued with the boys of this class.

The tutor should be particularly careful to lecture them (orally I mean) on the formation and progress of language; and he should develop its increase, with the increased wants of men. The savage in the woods, can have but few ideas, and consequently, but few sounds to express them. Hence in an early state of society, speech must be confined to a few words, to such merely as denote his appetites, passions or feelings. His food, his raiment, his hovel,

his dart, and his family, alone demand his care. He has few complex ideas, consequently, he is under no necessity of classing his words under regular forms of speech. The noun substantive is evidently, the first conventional sound in rude society : what two or three savages would have most occasion to refer to, or to use, they would agree to assign particular names to ; as a tree, a fountain, a javelin, a fish. These objects have not intrinsically any name originally appropriate to them, and had a *cave* been at first called a *fish*, or had a *dog* been called a *cow*, these appellations would have been received by us without hesitation, because all that is necessary in language is, that the word shall convey a strict idea of the object it is meant to represent. Thus had *black* been originally denominated *white*, and the color which we now recognize under the latter appellation been transferred to the former, it would have been equally acceptable to our understandings. And if in the book I am now writing, I previously inform my reader, that whenever I make use of the word *black*, I mean what he understands and expresses by the term *white*, it is evident, that the idea will be perfectly comprehensible to him, however he might ridicule the absurdity of my departure from the received terms of speech.

In the origin of languages, the sole object of men is to make their mutual wants intelligible to each other; and though there be many instances, where primitive things have sounds correspondent to their natures, yet, there was probably, no general rule on which these appellations were invented. What connection is there between the term *white*, and the color it represents, or the term *cow*, and the fourfooted animal of that name? as far as my observation extends, the Greek, German, and English possess more than any other languages, this connexion between sounds and things, and this is a strong characteristic of their force and beauty. Other languages are also distinguished by this circumstance, but to a less degree, without excepting even the Latin or Italian. I might illustrate this proposition by a multitude of examples now before me from the languages I have mentioned, but as it is not my object to swell the pages of this work, with what others have collected on the same subject, but to point out *where* the reader must dive for knowledge, I refer him to Lord Monboddo's profound inquiry on this subject, to Adam Smith's Dissertation on the formation of Languages annexed to his Theory of Moral Sentiments; *Essai sur l'Origine des Connoissances Humaines*

par Condillae ; Principes de Grammaire, par Marsais ; Traité de la formation mechanique des Langues, par De Brosses ; Warburton's Divine Legation of Moses ; and Sanctii Minerva, cum notis Perizonii.

From these, the reader will perceive that the analogies of sound have had considerable influence on the formation of words. Some of the radical letters or syllables which carry this expressive power in most languages, are, St, to signify stability or rest ; Fl, to denote fluency ; Cl, a gentle descent ; R, what relates to rapid motion ; C, to cavity or hollowness. And it is a peculiar excellency of our tongue beyond all others that these significant roots, express the objects which they name, by employing sounds sharper, softer, weaker, stronger, more obscure, or more stridulous, according as the idea which is to be suggested requires. Thus, words formed upon St, always denote firmness and strength, analogous to the Latin *Sto* ; as stand, stay, staff, stop, stout, steady, stake, stamp, stallion, state-ly, &c. Words beginning with Str, intimate violent force and energy, analogous to the Greek *stronnumi* ; as, strive, strength, strike, stripe, stress, struggle, stride, stretch, strip, &c. Thr, implies forcible motion ; as, throw, throb,

thrust, through, threaten, thralldom. Wr, obliquity or distortion; as, wry, wrest, wreath, wrestle, ~~wring~~, wrong, wrangle, wrath, wrack, &c. Sw, silent agitation or lateral motion; as, sway, swing, swerve, sweep, swim. Sl, a gentle fall or less observable motion; as, slide, slip, sly, slit, slow, slack, sling. Sp, dissipation or expansion; as spread, sprout, sprinkle, spill, spring. Terminations in Ash, indicate something acting nimbly and sharply; as, crash, gash, rash, flash, lash, flash. Terminations in Ush, something acting more obtusely; as, crush, brush, hush, gush, blush. Dr. Johnson, who openly discards this analogy between sense and sound, has nevertheless, acknowledged in his life of Pope, that every language has some words framed to exhibit the noises which they express. I wish he had given other reasons for his judgment, than that the mind often governs the ear.

When mankind had reached a more improved state of society; and arts and sciences began to be cultivated, men necessarily fell into habits of abstraction and generalization, which enlarged the powers of language. Objects were now distinguished from each other with greater accuracy. The word *tree* which the savage ap-

propriated to all trees, was more strictly received; and things capable of abstraction were reduced into classes. The word *tree* was employed to express the general term of all trees, or as logicians call it, the *genus generallissimum*, and the different species of trees were classed under different denominations, in which some additional quality was superadded to the general appellation; as, an elm-tree, an oak-tree, &c. and this, the logicians have termed *species specialissima*.

The understanding of a boy in civil society is not much above the level of that of a savage man; and therefore his conceptions will take place in the same manner, as the savage becoming civilized. If therefore, I wish to instil into his mind the principles of grammar (or in other words the principles of reason) with effect, I ought to begin by demonstration. I would address him thus: "that thing which you see there, is a thing distinct and separate from all others; all the world are agreed to call it a table. The word *table* is the name of it in our language. Every thing that exists by itself and apart has a name by which it is distinguished. You are also distinguished in this way; for when I use the word John, you know

that you are the person I mean; and when I mention the word *Dorchester*, you know that I name the place in which you live. So that you perceive, every thing, every person, and every place, which can be named, is self-existent. It is the practice of men and of grammarians to call either a person, a place, or a thing, by some particular name. This name is otherwise called a noun in English, from the Greek word *onoma*; and in French *nom* from the same root, for these words are synonymous; so that whatever has a name is a noun. But it is not enough that you should know the name or noun of a thing, you should also be acquainted with every thing that concerns it. That *table* you observe has several properties belonging to it: it is in the first place white: but, the word *white*, does not convey an idea of any thing self-existent, it inheres in something else, it must belong to some substance. The table is the substance, and its whiteness is an accidental property or quality belonging to it; therefore, you will call it, *a white table*, which expression denotes that what I see there, is a substance that possesses the quality of whiteness. The word *white*, therefore, expresses a particular quality of that particular table, and distinguishes it from the other table by the fire

side, which is of a brown color. Every word, therefore, which expresses the quality of any thing, person, or place, is called by grammarians, an adjective, which is derived from a latin word signifying *to add to*. In the next place, the table has another quality or mark of distinction, for it is *round*, which shews its difference from that by the fire side which is square. If then I ask you which table you mean, you would answer the round table, in contradistinction to the square one by the fire, but if there be another white table in the room, you would further distinguish it in order to make yourself intelligible to me, by annexing its other quality or adjective, and you would then call it, the *round white table*."

I have given this example merely to shew what I mean by lecturing boys orally and by demonstration on the first principles of grammar; the tutor can easily pursue my plan through the other parts of speech, and the distinction of genders without any further illustration. And as I have on several occasions tried the experiment on children and found it succeed, there can be no doubt of its propriety, if tutors will take the trouble of teaching their pupils after this method, and always

explain the meaning of the terms they employ.

While the pupils are in the habit of acquiring the first principles of grammar in the demonstrative method which I have suggested, and of remarking that without sensations, they would have had no idea of sensible objects, and without the senses no sensations, the tutor should not fail to pursue the same mode, in unfolding to them, the generation of ideas and the operations of the mind. To the objections which may be raised against the propriety of this system of education, I have already replied in the former parts of this treatise. The chief difficulty is at the commencement of the undertaking, and this will be very soon surmounted, if the tutor will have but a few days patience, and make all reasonable allowances for the inexperience of his pupils.

In these studies, the boys cannot be too well grounded, and therefore the length of time which they may occupy in applying to them, must not be considered as mispent; for the success of all their succeeding pursuits, depends essentially on their perfect comprehension of these principles. If therefore, their

progress appear tardy at the outset, it should not operate as a motive of discouragement either to the tutor or the pupil, or of disappointment and vexation to parents. An enlightened foundation will always ensure success in their future attempts, and the intuitive facility with which they will seize the thread of other sciences, will amply repay their youthful toil, and compensate them for the time which they have devoted to these subjects. In fact, no time will be lost; for without this previous attention to the fundamentals of all sciences, no particular science can be learned without extraordinary labor, and painful research,

To prepare their minds therefore, for study and science, they should be taught in a manner suited to their capacities, the principle operations of the understanding. The illustration of the following articles, will serve as a specimen of what I propose.

OF THE SEVERAL SORTS OF IDEAS. When bodies are present, we obtain a knowledge of them from the sensations which they excite in our minds; and when absent, we know them by the recollection or fresh excitation of those sensations. There is no other method of recog-

nizing them; therefore, our sensations represent them when actually existing in the mind, and when they exist merely by our recollection of them. These sensations when considered as representing things to the mind are called *ideas*; a word which in its original signification meant the same as what we now understand by *image*. As the images which represent things or ideas, are sensations, it follows, that we shall acquire as great a number of ideas as we have different sensations: and as our sensations are originally our only ideas, it is not possible for us to possess ideas if they be wanting. A person born blind can have no idea of colors; and were we possessed of a sixth sense, we should have ideas of which we are now ignorant. Whatever our ideas or sensations represent to us as existing in bodies, we call *qualities, manner of being or modifications*. They are called qualities, because it is by their means that bodies are distinguished from each other; manner of being, because they denote the manner in which they exist; and modifications, because more or less of a quality, produces some change in their manner of existence. When qualities are so essentially appropriate to one thing, that they are excluded from all others, we then call them *properties*. To be terminated

by three sides is the property of a triangle, and to be of a white color is the property of snow. When qualities distinguish things and express their modes of being, there is in them an inherent principle which we call *substance* from the Latin word *substare*, to be under, to bear up, which these qualities modify, which is their subject or support, and on which they depend. As our sensations give us no account of this principle, we can have no idea of it; but as qualities must modify something, the word *substance* is the term given to a thing of whose existence we are conscious, though we cannot form any notion of it.

If you want to discover the internal structure or mechanism of a watch, you will take it to pieces, arrange all its parts in order, and examine them separately one after another; you will remark how each part is made, how one acts upon another, and in what manner, the motion that is communicated by a primary spring, passes from one wheel to another, and sets the whole in motion even to the needle that marks the hours. The same method must be adopted in the resolution of things; and therefore let us inquire into the method of performing this operation.

It is impossible for any one of our senses to represent all the qualities which we perceive in bodies. The eye represents colors, the ear sounds &c. By employing the senses separately, things immediately begin to be resolved; we take notice successively of their different qualities, in the same manner as we should consider all the parts of a watch. The sense of feeling enables us to discover more qualities than any of the other senses; but when it represents several qualities together, it nevertheless takes notice of them only one after another. If I want to ascertain the length, breadth, and depth of any body, I must examine them separately. Now as the senses represent all qualities to us one after another, it is in our power to notice them in succession; we may therefore, consider them as existing apart and distinct from the substance which they modify. I can therefore think of *whiteness*, without thinking of this paper, of snow, or of any other white substance. Now whiteness considered apart from all substance, is called an abstract idea, from the Latin word *abstrahere*, which signifies, to separate from. If therefore, from all the ideas which I derive from the senses I form as many abstract ideas, I shall obtain the resolution of all the known qualities of bodies, because they have

been separated. As we put together in their proper order, the parts of a watch we had before taken to pieces, so we combine again the idea of a substance, when we collect together its qualities in the order in which they co-exist. It is necessary to adopt this method of resolution in order to view each quality by itself, and to renew the composition in order to contemplate the whole which results from the re-union of known qualities. This resolution and composition of our ideas is called analysis, and when a body has been thus analyzed, we may be said to comprehend it, as far as human nature will admit of.

There are qualities in every substance which may be discovered without comparing it with any other; as extension. These are called *absolute*. There are likewise qualities in every substance which can be discovered by comparison only, as greatness. These are called *relative*. Hence, to obtain a knowledge of things, we must not only consider their absolute, but also their relative qualities; and therefore, the moment they are analyzed they should be compared with each other; and unless we are methodical in our comparisons, our notions will be very confused. If I want to make use of my li-

brary, I place in a particular part, all the books on history; in another, the poetical books, &c. I then distinguish history into ancient and modern; modern history into the history of England, of France, &c. and in this manner, the books are arranged in different collections, which I call *classes*. The classes of ancient and of modern history, are subdivisions of the class of *historical books*; and in the same manner, the classes of the history of England, and the history of France, are subdivisions of the class of *modern history*. Those which are formed by a series of subdivisions, I call *classes subordinate to each other*: thus, the classes of the history of France and of the history of England, are subordinate to the class of *modern history*, and those of modern and ancient history, are subordinate to the class of *historical books*. When all the books are arranged in this way, it is evident that I shall readily find them again. It is precisely in this mode that we class things as soon as we observe them, and acquire different kinds of ideas. Every substance is one, and is called on that account single or *individual*. Peter and Paul are two *individuals*. If we say to a child that Peter is a man, he will conclude that Paul is also a man, because Paul resembles Peter. In a very short time he will apply the name *man*

to all the individuals who resemble Paul and Peter, and thus he will have classed all these individuals. When he takes notice, that among mankind, there are nobles and laborers, priests, and soldiers, scholars, and unlettered men, &c; the class which he distinguishes by the word *man*, will be subdivided into several other classes, that he will distinguish by different names. In like manner, when he reflects on what men possess in common with dogs, horses, &c; and that men, dogs, and horses, when considered only in respect to their common properties, are described by the term *animal*; he will then conclude that a man, a dog, a horse, &c; are only subdivisions of the class of *animals*, and he will include in this class every animal in proportion as it presents itself to him. The term *nobles* denotes only a part of the individuals who are described by the word *man*. The class which contains the greatest number of individuals, is called *general*, and that which includes only a certain number is called *special*. *Nobleman* therefore, is a special idea if compared with *man*; and *man* is general in relation to *nobleman*, *laborer*, &c. But, as the class denoted by the term *man*, is general, if compared with the classes in which it is subdivided; it becomes a

special class, if compared with the class of which it is a subdivision. *Man* therefore, is special, if compared with *animal*; and *animal* is general, if compared with man, dog, horse, &c. These classes are distinguished by the names of *genus* and *species*; the former denoting general classes or universal ideas, and the latter particular or special ones; so that *nobleman* and *laborer* are species if compared with man; and *man*, which is a *genus* in relation to them, becomes a species, if compared with the more general nature, *animal*. Qualities are classed in the same manner as the sensible objects on which they depend. If we reflect on qualities in relation to the senses, by which we come at a knowledge of them, we shall discover that there are five species, each of which becomes a genus, if compared with the classes in which it is subdivided. For example, *color* is a genus, if compared with the qualities known to us by the sight; and the colors are subdivided into several species, as white, black, &c. By this classification, we distribute things in order, and may then ascend from the individual, to the genus which comprehends every species, or pass from the genus to the individuals. On this account we distribute things into subordinate classes, without which distribution, all

our ideas would be confused, and it would be impossible for us to obtain a knowledge of the works of nature. When however, it has once been made, we shall find our ideas arranged in classes, in the same manner as the things of which we have taken notice. We have then, singular or individual ideas, which represent to us individual things; particular ideas, which represent the species; and general ideas, which represent the genus. The idea that I have of Peter, is singular or individual, and as the idea of man is general, if compared with the ideas of nobleman and peasant, so it is particular, if compared with the idea of animal.

Having inquired into the formation of our ideas, it will be easy to comprehend their several natures. A man or a color cannot, in general, be objects of our perception; we can only perceive a particular man, or a particular color, that is, we can only perceive individuals. When our senses present to our minds individuals only, we have, strictly speaking, only individual ideas. General ideas, are the names of those classes we have formed in proportion as we perceive the necessity of arranging our knowledge methodically, and they represent only what we perceive in individuals. The

general idea of man, represents only what we discover to agree in common to Peter, Paul, &c; on which account, we have, strictly speaking, only individual ideas.

If philosophers had retained in their writings this plain and unaffected method of explaining the generation of ideas, they would have avoided many frivolous disputes, and much false reasoning. To render these principles familiar to children, they should be further developed by reiterated examples; for as soon as they are capable of speaking, they are in possession of individual ideas, and of ideas of species and genres. It is only requisite to make them take notice of their own operations, and to explain to them some new denominations. In short, as there are words only to be learnt, those persons who are of opinion, that children are unfit to learn any thing but words, must admit that what we have been discussing, is within the reach of their understandings.

When the boys have sufficiently applied themselves to this subject, they should be lectured on such other operations of the mind as may be deemed fundamental; of which the following may serve as illustrations, or primary lessons.

OF ATTENTION. Whatever offers itself to our senses or to our minds, is an *object*. When you look with indifference at all the objects which present themselves, you take no more notice of one than of another; but, if you fix your eyes on any one in particular, you notice more forcibly the sensation it excites in your mind, to the exclusion of the other objects. Those sensations which you notice with most minuteness, inform you what passes in your mind when you are attentive. Attention therefore, implies two circumstances; when it acts on the body, it is the direction of the senses to a particular object; when on the mind, it is the sensation which this object excites within us, and which you notice in a more particular manner. This direction of the organs is the cause of attention, which exists exclusively in your mind, and is nothing else than the particular sensation that you experience. Hence, when several sensations are excited in your mind at the same time, and the direction of your organs cause you to notice any one of them, so as to exclude all the others, that sensation is called *attention*. Our attention may be directed to a part, or to a quality of an object, as well as to the object itself. When it is to an object which is present, it is nothing else than the strong particular sensa-

tion it excites in the mind ; and when it is given to an absent object, it is the recollection of the sensations which it has excited ; which recollection, is sufficiently quick and lively to be particularly noticed, and it is in fact, a sensation more or less distinct.

OF COMPARISON. When you give attention to, or take notice of two objects at the same time, you are said to compare them. Comparison therefore, is attention given to two things at a time. You have the power of comparing two objects that are before you, or two absent objects, or a present object with one that is absent. In any of these cases the comparison you make, is the same as your attention to the idea of two things ; that is to say, to the sensations which objects excite in you when they are present, and to the recollection of them when absent. If we say that we pay attention to two things, we mean that we have two attentions ; comparison is therefore, only a two-fold attention. We have already observed that attention is a sensation of which we take particular notice ; two attentions are therefore, two sensations, and consequently we discover nothing in comparison but sensations. But it may be asked, if attention and sensation be synoni-

mous, what is the meaning of the expression *to be attentive*? It signifies that if the object be present, we direct our senses to it in order to receive in a more particular manner, and in exclusion of all others, the sensations which it excites. But we cannot direct our senses on an object that is absent, we therefore pay attention to it only as far as the recollection which recalls it to our minds anticipates our attention; for if we have no recollection of it, we cannot think of it. But when the recollection is fresh in our minds, it will make us attentive provided we exclude the idea of every thing else; for in this case our recollection is the sensation of which we take particular notice.

OF JUDGMENT. When you compare two objects together, you perceive that they occasion within you either the same, or different sensations; that they are alike or differ; this is the act of judging. Comparison therefore, includes judgment, and consequently, the act of judging, like the act of comparing, is nothing but sensation. Things must either resemble, or differ; our judgments therefore, discover in objects either similitudes, or dissimilitudes, equalities, or inequalities. If you place one sheet of paper upon another, you will be able to judge

whether they be equal or unequal in size; if you place them beside each other, you will determine whether they be alike or different in color. Thus, by bringing them together, in order to judge of their equality or inequality, of their resemblance or difference, is called a discovery of their mutual relations; and therefore, we say that they are relatively alike or different, equal or unequal. These are the most general relations by which things are distinguished.

OF REFLECTION. You may direct your attention to several things successively, or to several parts, or to several qualities of the same thing, and according to this mode, you may compare those things, their parts or qualities, and form a judgment of them. When the attention from this mode of proceeding, derives a series of comparisons and judgments, you remark that it is carried in thought from one thing to another, from one part to another, and from one quality to another, and this we call *reflection*; which is the same as attention; passing and repassing from one idea to another, until we have made as many observations and comparisons as are necessary to judge of the thing which we are desirous of comprehending.

OF IMAGINATION. My attention may lead me to recollect an object that is absent, and represent it to me as if it were present. It may direct itself on one side to the notion of man, and on another to the idea of an hundred inches, and form out of these two ideas a single one. In either of these cases, the attention of the mind assumes the name of *imagination*; and for this reason we say, that a man of imagination has an inventive mind.

OF REASONING. A virtuous man should be rewarded. Peter is a virtuous man; therefore Peter should be rewarded.. This is reasoning, and it is formed of three judgments which are called *propositions*. As a judgment is only attention comparing and perceiving a relation, it is evident that the act of reasoning is attention also, because it is composed entirely of judgments. From the example above given, it is apparent that the third judgment, being included in the two former, constitutes an act of reasoning, for when I affirm that *Peter is a virtuous man, and that a virtuous man should be rewarded*, it is the same as if I said that Peter should be rewarded. This is self-evident: and this is the reason why a person who has perceived the truth of two previous judgments or

propositions, cannot deny the third; he concludes therefore, that Peter should be rewarded, and in drawing this inference, he only declares in an explicit manner, what he has already implicitly said. From this definition it is apparent that reasoning is nothing else than the attention determined to form a third judgment, from two others in which it is included.

OF THE UNDERSTANDING. The mind apprehends ideas in the same manner as the ear hears sounds; this is called the *understanding* of the mind, which comprizes the powers of attention, comparison, judgment, reflection, imagination, and reasoning; it is the result of all of them. These operations we call *faculties*, by which we do not mean that they actually exist in the mind, but that it is capable of them. This term is likewise applied in the same manner to the actions of the body. We possess the faculty of seeing, moving, comparing, and judging; because we are capable of seeing, moving, comparing, and judging. From these considerations we may conclude, that the operations of the understanding are nothing else than sensation transforming itself into attention, comparison, judgment, and reflection.

OF DESIRE. The privation of any thing which you judge to be necessary, produces in you an uneasiness or anxiety, by which you suffer in a greater or less degree : this is called *want*. The uneasiness you experience, fixes all your senses on the object of which you are deprived ; it also determines your mind to employ itself about all the ideas which it has of that object, and of the pleasure which it would receive from it. It determines therefore, the action of all the faculties of the mind and of the body. This determination of the faculties on the object of which it is deprived, is called *desire* : which therefore, is only the direction of the faculties of the mind and body, if the object be present.

Our desires are more or less lively, according to the greater or less degree of anxiety which privation excites ; for the more we suffer from the privation of any thing, the greater is the force with which we direct the faculties of the mind and body. When our desires are strong and continued, they are called *passions* ; that is, when our faculties are forcibly directed, and dwell upon the same object. If to this desire of a thing of which you are deprived, you add the proposition, *I shall obtain it* ; you immedi-

ately discover the origin of *hope*. Hence, hope supposes the privation of a thing; judgment, that it is necessary for us; and the proposition, that we shall obtain it. If, instead of the proposition, *I shall obtain it*, you substitute, *I shall find no obstacle, nothing can oppose me*; desire then, is called *will*. Therefore, *I will*, signifies *I desire, and I believe that nothing can obstruct my desire*.

OF THE WILL. It may be considered in a more enlarged sense as a faculty that comprehends all the operations which result from want; in the same manner as the understanding is a faculty, that comprehends all the operations which result from attention.

OF THE FACULTY OF THINKING. These two faculties, the will and the understanding are combined together in a more general faculty, which we call the *faculty of thinking*. To have sensations, to give attention, to form comparisons, &c. is *to think*; to want, to desire, to will, is also *to think*. In short, the word thought may be applied in general to all the operations of the mind as well as to each individually, in the same manner as the word *motion* is applicable to all the actions of the body. In the French language the word *penser* to think, is derived

from the Latin word *pensare* to weigh; which signifies that as we weigh bodies to discover their relative weight, the mind, in like manner, weighs its ideas when we compare them, in order to discover their mutual relation. Hence the word *penser* has two significations, the one of weight, referring to body, is used strictly; the other referring to the mind, is used figuratively, or metaphorically. The Romans expressed the word *thought* by another metaphor; they made use of the word *cogitatio*, which is derived from *coagito*, signifying *to collect, to put together*; because the operations of the understanding and of the will, require that the mind should assemble together its ideas.

OF HABITS. The word *to act* refers both to the body and the mind: when a body acts it moves. Motion therefore, is the action of a body, and we can distinguish as many different actions, as we distinguish movements in the body. Some of these actions are natural, because they are the effects of the conformation of our bodies, and are not directed by the will; such are the motions on which life depends. Others are the result of the will, and are directed by ourselves; you walk, because you will it. These actions are called *voluntary*. When we

make the body perform repeatedly the same actions, it will at length acquire such facility in executing them, that we shall no longer have occasion to direct its motions; it then acts as if it were determined by its natural organization. These kinds of actions are called *habits*, and it is very easy to illustrate them by examples. Thus, in Captain Wallis's voyage round the world, we are told that one of the chief men of Otaheite, appeared much more disposed to imitate our manners than the rest. This man, whom our people called Jonathan, soon attempted to use a knife and fork at his meals; but at first, when he had stuck a morsel upon his fork, and tried to feed himself with that instrument, *he could not guide it*, but by the mere *force of habit* his hand came to his mouth, and the victuals at the end of the fork went away to his ear.

But, although actions become habits, they were nevertheless, voluntary at the beginning, and have become habitual in consequence of frequent repetition. An habit is contracted from the circumstance of their being directed by the attention, and when it is once acquired, our actions preclude or rather anticipate the will, by operating without us, that is, without our be-

ing under the necessity of thinking about them. For instance, we have been at great pains in learning to read, and now we read, as if we never had any need of learning the art. The actions of the mind, that is, the operations of the understanding and the will, become habitual as well as the actions of the body. There are things which, during infancy, we are unable to comprehend, but on which we now reason with the same ease as if we had always understood them. A number of habitual judgments unfold themselves in the employment of our senses. Similar judgments discover themselves more sensibly in those combinations of ideas, which are at the same time, the sources of our errors and intelligence. We are often deceived by following without hesitation those false combinations which have become familiar to us, and then we persist more stubbornly in our errors. At other times, we conceive with ease, because we form our judgments on combinations which have been better made. The more these combinations are rendered habitual, the less we notice them, and the more rapid is our conception. Our minds are enlarged in proportion only as we have opportunities of forming many combinations of this kind.

When habits are once contracted, we seem to do things naturally, because we perform them with the same ease, as if done for us by nature alone. But it is incorrect to assert that such actions are natural; and to be convinced that they are only the effects of the habits which we have contracted, we need do nothing more than recollect that we have learnt to perform them. We may easily encrease the number of our habits by doing the same thing often; we may also diminish their number by discontinuing to do any thing, in consequence of which, we shall do it hereafter, however willing, with less ease, and even with difficulty. From this it follows, that we may acquire good habits and correct bad ones. These principles, though a little difficult at first, should be continually revived in the minds of boys; and when they are once able to comprehend the nature of attention, every other article will become easy and familiar; for their future studies will afford them repeated opportunities of reflecting over and over again, on the operations of their minds, and on the generation of their ideas.

These pursuits should always be accompanied by continual prelections of the purest English authors, and by committing to memory, the

most beautiful and energetic passages of their writings. The Messiah of Pope, and particularly his *essay on Criticism* should be gotten entirely by heart, and recited aloud, in order that the tutor may be enabled to correct the defective pronunciation and accent of the pupils, as well as to develop the reasonings contained in those masterly productions, to illustrate the general rules of grammar, and the principles which I have treated of above. No treatise was ever better adapted to this purpose than the *Essay on Criticism*, which expresses throughout the force of genius and judgment, vigorous, excursive, and acute.

The other occupations of the first division of the first class, should be confined to *writing* and *geography*. The neglect of writing in early life, is the reason that almost every line of our scholars and gentry (who seem to pride themselves in their bad penmanship) stands in need of an interpreter. As this art is purely mechanical, and perfected by practice only, it is foreign from my purpose, or even my ability, to prescribe any rules for its attainment. I will venture, however, to assert, that a plain, upright hand, resembling the round Roman print is preferable to the ridiculous flourishes and slopes of

writing masters; and my opinion is founded on a very simple reason—because it is more legible.

Geography is a science so very easy and entertaining, and its advantages so numerous and extensive, that it cannot fail to attract the attention, and to make a permanent impression on the minds of children. When the division is about to enter upon this study, the tutor should explain, by lecture, that is, verbally, the nature and use of the science; the structure of the earth, its division, and the evidences of its rotundity. For, the first conceptions of a boy respecting the formation of the earth, are much the same as those of the savage becoming civilized, with whom I have already compared him in page 234. We find from the reports of voyagers and travellers, that uninstructed nations generally suppose the earth to be a flat extended surface, surrounded by water. This was my own idea of it during infancy; and from the narrative of Lord Macartney's embassy by Sir George Staunton, it appears that this is still the opinion even of the enlightened Mandarins of China. As it is impossible that boys can make a rapid progress in any study, if they be deficient in its fundamental

parts ; this false conception should be rectified, if possible, by ocular demonstration ; if not, by such methods as approach nearest to it. I have not hitherto been so fortunate as to meet with any system of Geography, which treats of these subjects in a demonstrative method ; and therefore, I shall suggest a plan, which, will enable the lecturer to demonstrate to the eye, the instruction he wishes to convey to the mind.

I propose therefore, that there should be a large globular alto-relief in every Under Academy, which should represent the form of the earth, and the diversities on its surface. This will strike the senses most forcibly, and leave a more durable impression on the mind than any which can be derived from books or lectures. The machine should revolve on its axis in the same manner as a common globe, and represent on its superficies the continents, islands, peninsulas, isthmuses, and capes or promontories, the oceans, seas, gulphs, bays or creeks, straits, lakes, and rivers, into which the world is divided. The tutor should explain the various distributions of territory and water, at the same time that he points to each object on the machine. Thus, when he de-

fines the nature of an island as a body of land, entirely surrounded by water, he should point to the island, represented on the machine, which will have the appearance of a small spot raised above the surface, and will exactly describe the object in contemplation. If he want to give an account of any particular island, he must refer to our common geographical globes for a correct description of its shape and size; the object of the machine proposed, being only to give general ideas of the nature of islands, promontories, &c. &c. not of any particular island or promontory.

If there be any merit in the invention of such a simple instrument of knowledge, it belongs not to me; for the idea was first suggested to my mind, by the sight of a splendid and ingenious geographical alto-relief, in the shape of a parallelogram, invented by Lieut. General Psiffer of Lucerne in Swisserland. This able and venerable geographer, when above seventy years of age, climbed the cloud-capt mountains of his native country, and amidst the roar of cataracts, and of Lavanges loosened from their beds, and tumbling down with precipitate destruction, literally traced the topography of the Forest Cantons, with such correct exactitude, that it

may justly challenge the superiority over any undertaking of the kind, that has ever been performed in any age or nation of the world. His alto-relief represents every lake, mountain, cataract, and rivulet. Whenever he had reached the summit of a mountain, he picked up a stone, and on his return to Lucerne, modelled it to the precise shape of the mountain itself, which he described on his machine: lakes are represented by bits of slate fashioned according to the exact form of those he saw; a cataract is depicted by a little silver chain, a river by wire, and a road by light cords. The whole is a prodigious example of unshaken perseverance, of surprising ingenuity, of accurate discrimination, and of able workmanship. Nor was the execution more wonderful, than the undertaking dangerous. For in taking his observations, the ice would crack, and often threaten to overwhelm him in the depths of snow beneath. In all these adventurous excursions, his only sustenance was the milk of two she goats which were his sole companions in the wild scene. While he was taking his observations, they browsed on the declivity of the mountains; when he had finished and recalled them, they returned with ecstasy at the sound of his voice. By the help of a little salt, of which those crea-

tures are extremely fond, and a bag of which the General always carried with him, he induced them to follow his dangerous steps over all those terribly sublime and sequestered regions.

When the boys are perfected in the demonstrative part of the science, that is, are able to trace the boundaries of the several kingdoms, states and empires; to mark the principal towns and cities, the various divisions of land and water; the numerous islands, peninsulas and promontories; the seas, lakes and rivers, as exhibited on the terrestrial globe, or laid down in accurate maps, they should be lectured on the artificial lines and distinctions, which have been invented by geographers, to carry on their systems. A terrestrial globe should be placed on a table, and the tutor should explain the two points or poles, on which the earth is supposed to perform her diurnal motion, as well as the meaning and application of the terms Equator, Meridians, Degrees, Minutes, Tropics, Polar Circles, Zones, and Climates. When they have acquired the knowledge of the various divisions of the globe, and of its inhabitants, as they are distinguished by their respective situations; they should then contemplate the whole world divided into two great continents, the Eastern,

comprehending Asia, Europe, and Africa; and the Western, comprehending the two divisions of North and South America.

1. Asia with its various sovereignties, divisions, and subdivisions; their productions—their religions—their governments—their laws, customs, manners, and population. 2. Europe. 3. Africa. 4. America, with their productions, &c. Their minds should be thus impressed with the nature, properties, and extent of the globe, and in their progress, such general principles should be unfolded, as are easily comprehended; by such means the memory will be exercised, curiosity awakened, and they will be taught almost without perceiving it, the rudiments of the important sciences of politics, commerce, navigation, and history.

It should be observed, that illustrations of geography may be drawn from sources of exquisite delight and extensive information. When the name of a place occurs in the course of their reading, it should never be passed over without exacting from the pupils, a rigid account, not only of its situation, but of all those other circumstances which distinguish it; such

as its productions, manufactures, religion, government, laws, customs, manners, and population. If their preceding geographical studies do not enable them to answer the different questions which may be proposed on this subject, the tutor should immediately take down from the library (of which I shall give an account at the end of this chapter) such books of voyages or travels, as relate these particulars, and should make the boys read the passages aloud, and prepare themselves to give an account of their contents, at the next lesson. This practice, which is of infinite importance, should be unceasingly repeated, until the boys have perfected themselves in this interesting portion of their studies.

It must be evident to every reader, that this mode of studying geography, is far more comprehensive, than any thing of the sort now practised; for it embraces the knowledge of the origin of societies, and of the progress of man from barbarism to refinement. But its uses will be rendered more apparent, if we reflect, that the generality of the scholars are, from their situations in life, precluded from any expectation of enlarging their education by distant travel. Few indeed have either inclination or opportu-

nity to undertake expensive voyages ; and of very few may it be said that they have visited various regions ;

Wand'ring from clime to clime, observant stray'd,
Their manners noted, and their states survey'd.

Indeed, all the ends of travel may be attained with greater safety, and nearly with equal advantage, by studying the influence of climate, government, and religion, in the narratives of the best travellers and navigators. If, therefore, the principles of geography be thoroughly understood by the boys, and their further researches accompanied by this instructive method of illustration, I will venture to assert, that they will never while away in listless indolence, or vicious pursuits, the hours of relaxation, when they attain to years of maturity. On the contrary, the pleasing sensations which these recitals have occasioned in infancy, will revive with tenfold ardor in manhood ; and they will think on subjects worthy of rational man. A musing habit of contemplation will invigorate their faculties, and in contrasting the varied state of their fellow creatures in opposite regions of the globe—the voluptuousness of the savage inhabitant of Otaheite, and the filth and wretchedness of the barbarous inhabitant of the frozen

north, with the superior advantages of cultivated society, they will be able to perceive and to feel, the power of knowledge over the happiness of mankind.

With the aid of cheerful lights, and by a good fire, they may navigate the world with Cook, Wallis, and Vancouver; or they may travel with Sandys, Abyssinian Bruce, and Athenian Stuart. With the aid of Charlevoix, Laftau, and Carver, they may penetrate forests as aged as the world itself, and they may traverse the vast plains, and wide expanded lakes of America; they will admire the acuteness, the ardor, the bold, unlettered, and figurative eloquence, the high-born and independent minds, the astonishing activity, and equally inconceivable sloth, of their rude and uncivilized inhabitants. With Scheffer, with Peyrere, with Lubin, they may step into the sledge of the Laplander, and be alike surprised at the rapid fleetness of his rein-deer, and the placid satisfaction of his song, amid his mountains of ice and snow: or, in the six months night of Greenland, they may contemplate the dance and the song of the imprisoned inhabitants, contented, and drinking the health of their mistresses in chargers of oil. Quitting these frozen regions, they may

change the scene by a species of mental magic, and toil in imagination with Lobo and Loyer in Africa, under the ardors of a burning sun; or transport themselves to the milder and luxuriant regions of Asia and the East, with the missionaries of Europe, with Bernier, with Otter, with Chardin, with those admirable compilers Herbelot, Du Halde, &c.

In addition to the remarks which have been already offered on the study of this science, there should be a constant recurrence to maps whenever any place is mentioned, as they contribute both to amusement and instruction. After a very little practice, the boys will be able not only to distinguish every place, but likewise to describe its peculiarities, in the manner above mentioned. Turner's Introduction to geography, is a very proper book, to promote this scheme, and it may be successfully accompanied by Dr. Watts' Use of the globes, and by Guthrie's Grammar.

As soon as any number, or any one of the boys of this division, is judged to be well grounded in these different studies, there should be a remove into the second division of this class; when, in addition to their renewed at-

tention to their former pursuits, they should commence the fundamental operations of Arithmetic, to which all the others may be reduced—these are Addition, Subtraction, Multiplication, and Division, which compose the first part of the mathematics. And in this science, it is absolutely necessary that the fundamental definitions and principles should be clearly understood; and probably most tutors have found their pupils sadly bewildered in the course of their lectures, for want of proper care, and more patience in this respect. It will be therefore useful to explain the principal phenomena of this ingenious art.

Our most obvious and simple idea is that of *Unity* or *One*. By adding it to itself continually, and by retaining the several collections in our minds, we obtain all the different combinations of *numbers*, in which we readily perceive an endless diversity. All these ideas are nevertheless, evidently distinct among themselves, the addition of a single unit, constituting a number as clearly different from that immediately before it, as any two ideas, however remote, are from one another. But, that the understanding may not lose itself in the consideration of those infinite combinations of which u-

nity is capable, it proceeds by regular gradations; and beginning with the original idea itself, pursues it through all its varieties, as formed by the repeated continual addition of unit after unit. Thus numbers are made to follow one another in an orderly progression, and the several successive collections are distinguished by particular names. And here we may remark a wonderful artifice, employed by the mind, to facilitate and help it forward in its conceptions. For as the advances from number to number are endless, were they all to be distinguished by different denominations, which had no connection or dependence one upon another, their multitude must soon surcharge the memory, and render it impossible to proceed any great way in the progress of numbering. For this reason, it is so contrived, that the change of names is restrained to a few of the first combinations, all the rest that follow, being marked by a repetition of the same terms, variously compounded and linked together. Thus *thirteen* is ten and three; *fourteen* ten and four; and so on to *twenty*, or two tens, when we begin again with one, two, &c. until we advance to *thirty*, or three tens. In this manner the progression continues, and when we arrive at ten-tens, to prevent confusion by a too frequent repetition of the same

word, that sum is distinguished by the name of a Hundred. Again, ten hundred is called a *Thousand*, at which period the computation begins anew, running through all the former combinations, as ten thousand, a hundred thousand, ten hundred thousand; which last collection, for the reasons mentioned above, has the name of a *million* appropriated to it. With this million we can begin as before, until it is repeated a million of times, when if we change the denomination to *Billions*, and advance in the same manner through *Trillions*, *Quartillions*, the series may be carried on without confusion, to any length we please.

Arithmetic, as well as Algebra, is an art of invention; and in the former we are frequently engaged in the discovery of unknown numbers, by means of their relations and connections with others that are known; as where it is required to find a number equal to the sum of two others, or the product of two others. It likewise furnishes the best models of an happy sagacity and management, in classing and regulating our perceptions. So that here more than in any other branch of human knowledge, we shall have an opportunity of observing, how much an orderly disposition of things, tends to

the ease and success of our inquiries, by leaving us to canvass the parts separately, and thereby rise to a gradual conception of the whole, without entangling ourselves with too many considerations at once, in any single step of the investigation. For it will indeed be found, that a dexterity and address in the use of this last advantage, serve to facilitate and promote our discoveries, almost beyond imagination or belief.

Having already explained the manner of reducing numbers into classes, and of distinguishing these classes by their several names, we are further to observe, that the present method of notation is so contrived, as exactly to correspond with this form of numbering. For, as in the names of numbers, we rise from *units* to *tens*, from *tens* to *hundreds*, from *hundreds* to *thousands*, &c, so likewise in their notation the same figures, in different places, signify these several combinations. Thus 2, in the first place on the right hand, denotes *units*, in the second place, it expresses so many *tens*, in the third, *hundreds*, in the fourth, *thousands*. By this mean it happens, that when a number is written down in figures, as every figure in it expresses some distinct combination, and all these combinati-

ons together make up the total sum; so may the several figures be considered as the constituent parts of the number. Thus the number 2436, is evidently by the very notation distinguished into four parts, marked by the four figures that serve to express it. For the first denotes *two thousand*, the second *four hundred*, the third *thirty* or *three tens*, and the fourth *six*. These several parts, though they here appear in a conjoined form, may yet be also expressed separately thus, 2000, 400, 30, and 6, and the amount is exactly the same.

If then, it is required to find a number, equal to the sum of two others given, our business is to examine separately these given numbers, and if they appear too large and bulky to be dealt with by a single effort of thought, then, since the very notation distinguishes them into different parts, we must content ourselves with considering the parts asunder, and finding their sums one after another. For since the whole is equal to all its parts, if we find the sums of the several parts of which any two numbers consist, we certainly find the total sum of the two numbers. And therefore, these different sums, united and put together, according to the established rules of notation, will be the

very number we are in quest of. Let it be proposed, for instance, to find a number equal to the sum of these two: 2436, and 4352. As the finding of this by a single effort of thought, would be too violent an exercise for the mind, I consider the figures representing these numbers as the parts of which they consist, and therefore set myself to discover their sums one after another. Thus 2 the first figure on the right hand of the one, added to 6 the first figure on the right hand of the other, makes 8, which is therefore the sum of these two parts. Again, the sum of 5 and 3, the two figures or parts in the second place, is likewise 8. But, as figures in the second place, denote not simple units, but tens; it is evident, that 5 and 3 here, signify five tens and three tens, or 50 and 30, whose sum therefore must be eight *tens*, or 80.

And here again I call to mind, that having already obtained one figure of the sum, if I place that now found immediately after it, it will thereby stand also in the second place, and so really express, as it ought to do, eight *tens* or 80. And thus it is happily contrived, that though in the addition of the *tens*, I consider the figures composing them as denoting only simple *units*, which makes the operation easier

and less perplexed; yet by the place their sum obtains, in the number found; it expresses the real amount of the parts added, taken in their full and complete values. The same thing happens in summing the *hundreds* and *thousands*; that is, though the figures expressing these combinations, are added together as simple *units*; yet their sums standing in the third and fourth places of the number found, thereby really denote the hundreds and thousands, and so represent the true value of the parts added. Here then we have a manifest proof, of the great advantages derived from an artful method of classing our perceptions. For as the numbers themselves are by this mean distinguished into different parts, which bring them more readily within the compass of the understanding; so by taking these parts separately, the operations about numbers are rendered very easy and simple. And indeed it is particularly worthy of our notice, that though in adding two very large numbers together, the whole process is of sufficient length; yet the several steps by which it is conducted, are managed with incredible dispatch, and scarcely any fatigue to the mind. This is apparent in the example given above, where we see, that in every advance from one part to another, nothing more is required, than

to add together the two figures in the like places of the numbers to be summed. But what is yet more wonderful, though in the progress of a long operation, the figures rise in their value as we advance, and signify at length *thousands, millions, billions*, &c, yet so happily are they contrived for expressing the different parts of numbers, that in every step of the procedure, we consider them as denoting only simple units, all other deficiencies being made up, by the places their sums obtain in the total amount. And thus it is so ordered in this admirable form of notation, that however large the numbers are which come under examination, they are nevertheless managed with the same ease as the most simple and obvious collections; because, in the several operations about them, the mind is neither tied down to the view of too many parts at once, nor entangled with any considerations regarding the bulk and composition of those parts.

And if these advantages are so very manifest in the first and simplest rules of Arithmetic, much more do they discover themselves in those that are intricate and complex. Let a man endeavor in his thoughts, to find the product of two numbers, each consisting of twenty or thirty

places, and that without considering the parts separately; I believe he will soon be sensible, that it is a discovery far beyond the limits of the human mind. But in the progressive method above explained, nothing is more simple and easy. For if we take the first figure on the right hand of the one number, and by it multiply every figure of the other separately; these several products connected according to the established laws of notation, must represent the total product of the other, by that part of the multiplying number. Let us suppose for instance, the figure in the units place of the *multiplicand* to be 2, and the three last places of the *multiplicand* to be 432. Then, 2 multiplying 2 produces 4, which therefore is the first part of the product. Again, 2 multiplying 3 produces 6; but 3 standing in the second place of the multiplicand, denotes in its real value three *tens* or 30, which therefore taken twice, amounts to six *tens*, or 60. And accordingly the figure 6 coming after 4 already found, is thereby thrown into the second place of the product, and truly expresses 60, its full and adequate value. The same thing happens in multiplying 4, which standing in the place of *hundreds*, its product by 2 is 800; which this very sum the figure 8, produced from 2 and 4, really denotes

in the total product; because coming after 64, the two parts already found, it is thereby determined to the third place, where it of course expresses so many *hundreds*. This process, it is evident, may be continued to any length we please; and it is remarkable, that as in addition, though the value of the figures in the multiplicand continually rises upon us, yet we all along proceed with them as simple units; because the places of the several products in the total amount, represent the just result of multiplying the figures together, according to their true and adequate value.

Having thus obtained the product by the first figure of the multiplier, we next take that in the second place, and proceed with it in the same manner. This second operation gives us the effect of that figure, considered as a simple digit. But as it stood in the second place, and therefore really denoted so many *tens*, hence it is plain that the product now gained must be yet multiplied by *ten*, in order to express the true product sought. This is accordingly done in the operation, by placing the first figure of this second product under the second figure of the first product. For when they come to be added together, it has the same effect as annex-

ing a cypher, or multiplying by *ten*; as is known to every one in the least acquainted with the rules of Arithmetic. In like manner, when we multiply by the figure in the third place, as this new product is placed still one figure backwards, we in effect, annex two cyphers to it, or multiply it by a *hundred*. And this we ought certainly to do; because having considered the multiplying figure as denoting only simple units, when it really expressed so many hundreds, the first operation gives no more than the hundredth part of the true product. The case is the same in multiplying by the fourth or fifth figures, because the products still running backwards, we thereby annex as many cyphers to them, as bring them severally to their respective adequate value. By this mean it happens, that though the figures of the multiplier in every advance, denote still higher and higher combinations, yet we all along proceed with them as simple digits; the disposition of the several products in order to addition, making up for all the deficiencies that arise from this way of considering them. When in this method of procedure, we have obtained the product of the multiplicand into all the different parts of the multiplier, by adding these products together, we obtain also the total product of the two numbers. For

since the whole is equal to all its parts, nothing is more evident, than that the product of any one number into another, must be equal to its product into all the parts of that other: and therefore, the several partial products united into one sum, cannot but truly represent the real product sought.

Thus we see, that in questions of multiplication, though the whole process is sometimes sufficiently long and tedious, yet the several steps by which it is carried on, are all level to the powers of the understanding. For from the account given above, it appears, that nothing more is required in any of them, than barely to multiply one digit by another. But this easy rule of operation, is wholly derived from the address before mentioned in classing our perceptions. For to this it is owing, that the numbers under consideration are distinguished into parts, and that the several parts are also clearly represented to the mind, in the very form of notation. Now as these parts have an invariable relation one to another, and advance in their value by an uniform law of progression; the understanding by means of such a link, can easily hold them together, and carry its views from stage to stage, without perplexity or confusion.

Hence it happens that though the numbers be so large and mighty as far to exceed the immediate grasp of the mind; yet by running gradually through the several combinations of which they are made up, we at length comprehend them in their full extent. And because it would be impossible for the understanding, to multiply very large numbers one into another, by a simple effort of thought; therefore in this case also, it considers the parts separately, and taking them in an orderly series, advances by a variety of successive steps. It is true indeed that in the progress of the operation, the several figures rise in their value; but this consideration enters not the work itself. For there, as we have already seen, though the characters are taken as denoting only simple units, yet the order and disposition of the partial products exhibit each according to its real amount. Hence, in every step, we have only to multiply one digit by another, which as it is attended with scarcely any difficulty, the whole process is carried on with wondrous dispatch. And thus by a series of easy operations, we at length rise to discoveries, which, in any other method of procedure, would have been found altogether beyond the reach of the mind.

When these principles have become familiar to their minds, the boys should enter upon the mechanical part of the science, in which they will derive every necessary information from *The Scholar's Guide to Arithmetic*, by Bonnycastle, the tutor taking care to furnish them with fresh examples; and when they are thoroughly grounded in the four fundamental operations, they should proceed through all the different rules of arithmetic. In this division, they may study Rollin's *Account of the Arts and Sciences*; and Brooke's *Natural History of Fossils, Plants, and Animals*. These works are calculated to give them general notions on a variety of useful subjects; but they should not constitute their only occupations. The preliminary lectures on general grammar; and the repeated application of its rules to the structure of sentences, which has been hitherto investigated only through the medium of lectures, should now be further rooted in their minds, by the assistance of some practical treatise on the grammar of their own language. While therefore, they are lectured on general principles, for which the *Port-Royal General and rational grammar* will serve as a test book, they should be put into Lowth's *English grammar*, which they must commit almost entirely to memory, and exemplify its

rules from passages in the books which they are reading. They may now study for a knowledge of Chronology, from the tenth to the fourteenth lecture inclusive, of Priestly's Lectures on History, not omitting however, the short account of the different modes of computation, in the first volume of Lord Chesterfield's letters. The last division, besides their other studies, should devote themselves to the further cultivation of grammar, and the attentive perusal of Goguet's work on the *Origin of Laws, Arts, and Sciences*; a masterly production, admirably calculated to dissipate the prejudices of infancy, and to open the understanding to the reception of most important truths. No opinion is more prevalent among boys, and even among many persons grown to years of maturity, than that the world was always what they now see it. This notion is, however, as erroneous as that before alluded to, when they imagined they had never learnt to think. The infant world is a paradox that will excite their curiosity; they will make observations upon it, in the same manner, as they took notice of what passed within themselves, and therefore, nothing can be more appropriate to their understandings, than the rise and progress of arts and sciences. There are besides, many advantages attendant on this study; for,

they will acquire thereby all kinds of ideas; they will perceive in what manner their wants conducted mankind from one species of knowledge to another, from one custom, and from one opinion to others: and by remarking in the first stage of their study, the influence of physical and moral causes, they will discover that societies are subjected to continual changes. By habituating themselves to observe, that amidst all these revolutions of customs and opinions, it would have been happy for the peace of society, if many things which have been done, had never been undertaken; that prejudices exist every where, and therefore, that they should guard against their insidious approaches, and discharge from their minds, those which they may have unfortunately contracted. Whatever they do not readily comprehend of these subjects should be explained, and they ought to give a sketch of each preceding lesson, before they enter upon a subsequent one. By this process, the pupils will acquire an astonishing fund of useful and general knowledge. Goguet's treatise being considered as a text book, the lecturer will have occasion to make frequent expositions of its contents; I would therefore recommend him to make use of the following works, from which he will derive great assist-

ances in the elucidation of his subject ; namely, Furguson's Essay on Civil Society, Dunbar's Essay on the same subject, Lord Kame's Sketches of Man, and Millar on the Distinction of Ranks in Society.

It will be now proper to give them more extended notions of English poetry ; all the subordinate parts of which, such as tropes, episodes, &c, may be developed by rules and illustrations from our best poets ; and the nature, plan, and various acts of the drama, by recitations of our choicest tragedies, and most chaste comedies. Their beauties and their defects should be scrutinized and rendered apparent ; and the pupils taught to form their taste, by comparing the different modes in which our poets handle the same subject. Spence's Dialogues on Pope's translation of the Odyssey, Blair's Lectures on Rhetoric and Belles Lettres, those parts of Rollin on the same subject which treat of the figures of speech, and Johnson's Lives of the Poets, will be found to be indispensable auxiliaries. Not a day should elapse without reading the poets. Pope's Rape of the Lock, the beautiful Epistle of Eloisa to Abelard, the Windsor Forest, and indeed all the poetical works of that accomplished writer,

with the exception of the *Essay on Man*, the subject of which he did not understand, should be read, studied, and made their own. The same attention should be likewise shewn to the works of Dryden, particularly his *Essay on Dramatic poetry*. It is with infinite pleasure I take this opportunity of paying a tribute of respect to a philosopher, a poet, and a good man, in recommending the elegant poem of the *Minstrel* by Dr. Beattie. To these may be added Gray's *Elegy in a country church yard*, Goldsmith's *Traveller* and *Deserted Village*, the *Wanderer of Savage*, and Dodsley's collection of poems, in which are many specimens of elegant writing. But of all the poets, Pope is unrivalled for versatility and correctness in the structure of his sentences, and therefore he is the most proper to form their taste; they ought to go through his works again and again, until it may be said that they have nearly gotten them by heart. They should be made to notice every essential word and sentiment, and, although it cannot be supposed that they will comprehend every thing, yet, in the progress of their studies, they will retrace the ideas which were at first difficult, and the explication of future passages will remove the obscurities they have met with, in their former prelections. This observation is

made in order to shew, that it is not necessary the course of their studies should be interrupted by one or a few obstacles.

The third division having advanced considerably in the knowledge of the origin of arts, sciences, and laws, they should be instructed in a more succinct detail of the various nations which have figured on the great theatre of the world. It is not proposed that they should dive into the remote and obscure investigations of historians and antiquaries, but merely to have a general sketch of the annals of civilized man. For, as the study of grammar, from the numerous objects it embraces, will occupy so much of their time, and necessarily give a surprising vigor and acuteness to their minds, the exercise of their memories in the narrations of history, will afford them great relief and information. Previous to which, however, some account of the Pagan Mythology should be given to them, which may be obtained out of the first volume of Chesterfield's letters, King's Account of the Heathen Gods, Tyndal's Polymetis, and Bannier's Mythology. While they are learning this easy and agreeable science, they may read through in succession, Goldsmith's History of ancient Greece, with Cellarius's Maps, and his

History of Romé, with the abridgement of Gibbon's History of the Decline and Fall of the Roman Empire, which will serve as a sequel to the former. While they are engaged in the study of the Grecian History, let them read Pope's translation of Homer's Iliad and Odyssey, in which they will discover the primitive institutions and manners of those early ages, an account of the site of places (for Homer was a correct geographer) and improve their taste in poetry and composition. I must again remark that they should be enjoined to describe the modern name, and position of every place which occurs in their reading either of poets or historians, and to give an account of its ancient and present peculiarities. This is also the time to unfold the uses and abuses of history, on which the tutor may easily lecture them, by digesting the substance of Bolingbroke's letters on the study of history, of Dr. Priestley's lectures, Lord Bacon's observations upon the same subject, in his noble treatise *De augmentis scientiarum*, and Degory Wheare's excellent, but much neglected work, *de ratione legendi utrasque historias*. And it may not be amiss, when they have arrived at that portion of Grecian history which records the feats of arms, and magnanimous heroism of the Spartans at Thermopylæ, that

they should read the spirited and patriotic poem of Leonidas, written by Mr. Glover. It cannot be too often repeated, that in this or in any other pursuit, it is the duty of the tutor not to suffer any circumstance of importance to escape their notice ; but every advantage should be taken of the names of persons, and the occurrence of events, to discuss the principles of government and society, to inquire into the state of arts and sciences, to investigate the superstitious creed of antiquity, and to elucidate, in short, every subject which is interesting to the human mind, and within the range of their capacities. The inculcation of these moral and physical truths, will relieve the intellect from the fatiguing habit of parsing, and from other dry and laborious exertitions: their memories will be continually refreshed, their imaginations awakened, and their judgments matured, so as to prepare them unexpectedly, for a more scientific comprehension of the subjects, to which they have hitherto dedicated their attention. This observation is particularly applicable to their grammatical researches ; for, although it cannot reasonably be expected that they should, at this time, be perfect masters of every part which is submitted to them, yet their advances will be greatly accelerated by

the good taste of their preceptors in illustration; and on this depends their future success, in the more abstruse principles of grammar, rhetoric, and logic.

Geometry is the only remaining study of this division. Of all the works of antiquity which have been transmitted to the present times, none are more universally and deservedly esteemed than the elements of geometry which are known under the name of Euclid. In many other sciences, the moderns have far surpassed their masters; but after the lapse of more than two thousand years, this performance still maintains its pre-eminence, and has even acquired additional celebrity from the fruitless attempts which have been made to establish a different system. This science, is of itself, an excellent system of logic, and forms the mind to an habit of close and methodical reasoning. On this conviction, it is strenuously recommended to the diligent attention of every pupil; not, as the great Mr. Locke observes in his *Conduct of the Understanding*, that we look upon it as necessary, that all men should be deep mathematicians, but that having got the way of reasoning which that study necessarily brings the mind to, they may be able to transfer it to other

parts of knowledge, as they shall have occasion. For in all sorts of reasoning, every single argument should be managed as a mathematical demonstration, the connection and dependance of ideas should be followed, till the mind is brought to the source on which it bottoms, and can trace the coherence through the whole train of proofs. It is in general observable, that the faculties of our souls are improved, and made useful to us, just after the same manner, as our bodies are. Would you have a man write or paint, dance or fence well, or perform any other manual operation, dexterously and with ease? Let him have ever so much vigor and activity, suppleness and address naturally, yet nobody expects this from him unless he has been used to it, and has employed time and pains in fashioning and forming his hand, or outward parts, to these motions. Just so it is in the mind; would you have a man reason well, you must *use him to it betimes*, exercise his mind in observing the connection of ideas, and following them in train. Nothing does this better than mathematics; which therefore I think should be taught all those, who have the time and opportunity, not so much to make them mathematicians, as to make them reasonable creatures; for though we all call ourselves so, be-

cause we are born to it, if we please ; yet we may truly say, nature gives us but the seeds of it. We are born to be, if we please, rational creatures ; but 'tis use and exercise only that make us so, and indeed we are so, no further than industry and application have carried us.

It has been mentioned several times that the demonstrative method of teaching, is superior to all others ; it is therefore self-evident, that in geometry, it may be exercised with a certainty of success. The same discipline should be observed in the introduction to this, as to all the other studies in which they have been initiated. Its nature and uses should be explained, and they should be forewarned that many of the ideas of geometricians are mere creatures of the understanding, and not supposed to be patterns existing without us. A circle, a triangle, a square, &c, such as mathematicians conceive them, are no where to be found in nature. Nothing contributes so much to the improvement and certainty of knowledge, as determinate ideas, and retaining them steady and invariable in all our discourses and reasonings. On this account, mathematicians always begin by defining their terms, and by distinctly unfolding the notions they are intended to express. Hence,

those who apply to these studies, having exactly the same views of things, and bringing always the very same ideas into comparison, readily discern the relations between them, when clearly and distinctly represented. Nor is there any more natural and obvious reason, for the universal reception given to mathematical truths, and for that harmony and correspondence of sentiments which make the distinguishing character of the *Literati* of this class. When they have taken this first step, and made known the ideas whose relations they intend to investigate, their next care is, to lay down some self-evident truths, which may serve as a foundation for their future reasonings. And here indeed they proceed with remarkable circumspection, admitting no principles, but what flow immediately from their definitions, and necessarily force themselves upon a mind, in any degree attentive to its perceptions. Thus, a *circle* is a figure formed by a right line, moving round some fixed point in the same place. The fixed point round which the line is supposed to move, and where one of its extremities terminates, is called the *center* of the circle. The other extremity, which is conceived to be carried round, until it returns to the point whence it first set out, describes a curve running into itself, and

termed the *circumference*. All right lines drawn from the center to the circumference, are called *radii*. From these definitions compared, geometricians derive this self-evident truth; *that the radii of the same circle are all equal one to another*. I call it self-evident, because nothing more is required to lay it open to the immediate perception of the mind, than an attention to the ideas compared. For from the very genesis of a circle it is plain, that the circumference is every where distant from the center, by the exact length of the describing line; and that the several radii are in truth nothing more, than one and the same line variously posited within the figure. In all propositions we either affirm or deny some property of the idea that constitutes the subject of our judgment, or we maintain that something may be done or effected. The first sort are called *speculative* propositions, as in the example mentioned above, *the radii of the same circle, are all equal one to another*. The others are called *practical*, for a reason too obvious to be mentioned; thus, *that a right line may be drawn from one point to another*, is a practical proposition; inasmuch as it expresses that some thing may be done. From this twofold consideration of propositions arises the twofold division of mathematical principles,

into *axioms* and *postulates*. By an *axiom* they understand any self-evident *speculative* truth: as *that the whole is greater than its parts; that things equal to one and the same thing, are equal to one another*. But a self-evident practical proposition, is what they call a *postulate*. Such are those of Euclid, *that a finite right line may be continued directly forwards: that a circle may be described about any center with any distance*. And here we are to observe, that as in an *axiom*, the agreement or disagreement between the subject and predicate, must come under the immediate inspection of the mind; so in a *postulate*, not only the possibility of the thing asserted, must be evident at first view, but also the manner in which it may be effected. But where this manner is not of itself apparent, the proposition comes under the notion of the demonstrable kind, and is treated as such by geometricians. Thus, *to draw a right line from one point to another*; is assumed by Euclid as a *postulate*, because the manner of doing it is so obvious, as to require no previous teaching. But then it is not equally evident, *how we are to construct an equilateral triangle*. For this reason he advances it as a demonstrable proposition, lays down rules for the exact performance, and at the same time proves, that if these rules be followed, the fi-

gure will be justly described. This naturally leads us to take notice that as *self-evident truths*, are distinguished into different kinds, according as they are speculative or practical; so is it also with *demonstrable* propositions. A demonstrable speculative proposition, is called a *theorem*. Such is the famous 47th proposition of the first book of the *Elements*, known by the name of the *Pythagorick* theorem, from its supposed inventor Pythagoras, viz. *That in every right-angled triangle, the square described upon the side subtending the right angle, is equal to both the squares described upon the sides containing the right angle.* On the other hand, a demonstrable practical proposition, is called a *problem*; as where Euclid teaches us, *to describe a square upon a given right line.* It may not be amiss to add, that besides the four kinds of propositions already mentioned, mathematicians have also a fifth, known by the name of *Corollaries*; these are usually subjoined to theorems, or problems, and differ from them only in this; that they flow from what is there demonstrated, in so obvious a manner, as to discover their dependance upon the proposition whence they are deduced, almost as soon as proposed. Thus Euclid having demonstrated, that *in every right-lined triangle, all the three angles taken together are equal to two right angles;*

adds by way of corollary, that *all the three angles of any one triangle taken together, are equal to all the three angles of any other triangle taken together*; which is evident at first sight, because in all cases they are equal to two right ones, and things equal to one and the same thing, are equal to one another. The last thing I shall take notice of in this practice of the mathematicians, is what they call their *Scholia*, they are indifferently annexed to definitions, propositions, or corollaries; and answer the same purposes as annotations upon a classic author. For in them occasion is taken to explain whatever may appear intricate and obscure in a train of reasoning; to answer objections; to teach the application and uses of propositions; to lay open the original and history of the several discoveries made in the science; and in a word, to acquaint us with all such particulars as deserve to be known, whether considered as points of curiosity or of profit.

Thus I have taken a short view of the celebrated method of mathematicians; which, to those who consider it with proper attention, must appear universal and equally applicable in other sciences. They begin with definitions: from these they deduce their axioms and postulates, which

serve as principles of reasoning ; and having thus laid a firm foundation, advance to theorems and problems, establishing all by the strictest rules of demonstration. The corollaries flow naturally and of themselves. And if any particulars be still wanting, to illustrate a subject, or complete the reader's information ; they are generally thrown into a scholia, that the series of reasoning may not be interrupted. In a system of knowledge so uniform and well connected, no wonder if we meet with certainty ; and if those clouds that deface other parts of human science, and bring discredit even upon reason itself, are here scattered and disappear.

If it be objected that it is too early for boys to commence the study of geometry, which may be thought too sublime and abstruse for their conceptions ; I answer, that it is a science purely demonstrative, and consequently, not beyond the reach of their understandings. The strong habit of attention which it exacts, and to which it leads ; the assistance which it is universally acknowledged to afford the reasoning powers, are proofs of its important influence on the education of youth. Those gentlemen who have been frightened away from Cambridge to Oxford, at the sight of the old Carpenter's

book, will reject all that has been said as visionary metaphysical jargon; but that a science of such precision in its principles, and of such universality in its applications, should be neglected in a system of liberal education, appears to me, a prejudice of the most debasing nature, and worthy only of the minds of those, who would comprehend all human knowledge in the reading of a novel, a newspaper, or a magazine. Some apology may, however, be made for them; had they been early instructed in the definition of terms, they would never have turned aside from the sublime and elegant demonstrations of geometry.

No cause, perhaps, has more obstructed a progress in mathematics, than the mistaken though modest notion, that such men as Newton, Gassendi, Euler, &c. have soared to the extremest verge of mathematical investigation, beyond which there is nothing new to be explored, and no scope for assiduous and penetrating genius. It should however be remembered, that had those great men thought after this disconsolate mode, those discoveries which have enriched the book of human knowledge, and immortalized their names as the instructive benefactors of mankind, would never have

blessed the world. The same prejudice was entertained respecting the metaphysics of the illustrious Mr. Locke, when his pensive mind broke loose from the thralldom of scholastic subtleties, and explored by new lights, the regions of the human intellect. Yet, have we lived to behold the day, when not only many of his opinions, but even several of the doctrines of Newton, have been corrected by the enlarged experience and inquisitive labors of a philosophical and enlightened age.

We are not justified in drawing an analogy from a solitary instance of juvenile proficiency; for such an astonishing genius for the mathematics, as Paschal, is rarely to be found. Nature is not lavish of such gifts to the world; she is parsimonious of philosophers. They arise but once or twice in a long revolution of ages; like the divinities of Homer, they traverse in a few strides the whole circle of creation, and when they disappear, they leave an admiring posterity, to ascribe almost to supernatural causes, the effects of early habit, and of disciplined attention.

As soon as the pupils have been prepared by preliminary definitions for the practical appli-

cation to the science, they should enter upon Bonnycastle's Elements of Geometry, which has all the accustomed neatness and accuracy of the other writings of this ingenious and able mathematician. In this work the obstacles arising from the theory of parallel lines, the doctrine of proportion, and many things in the eleventh and twelfth books of Euclid, relating to solids, which are extremely embarrassing, and greatly retard the progress of learners, are obviated; and the subject is rendered more familiar and perspicuous, without weakening its evidence, or destroying its elegance and simplicity. After they have perfected themselves in the first six books of the Elements, they should apply to the same author's Introduction to Mensuration and Practical Geometry.

When they have accomplished these various studies, their minds will be furnished with a considerable stock of knowledge, and a solid foundation will be laid for the future exercise of their talents. As the pursuits of the First Class close here, those who are competent to undergo a general examination on all the sciences they have studied, should be permitted to offer themselves as candidates for admission to

the Second Class. Those who are deemed qualified, after having been examined by the Head Master and the tutors, should be removed into the first division of the Second Class, according to their priority in learning. The best qualified pupil should take precedence of his comrades, and so on with the rest in proportion to their proficiency. If any boys should be found deficient, they must remain in the first class, and be referred to those sciences wherein they are defective, until they are able to pass another examination, to which they should be always entitled, whenever they require it. These public examinations will give a surprising spur to youthful emulation; for all the boys of every class in the Academy should on these occasions cease their labors, and be present at them. Thus, the higher classes will hear their early studies revived, and the divisions of the lower class, will have a full insight of the course of science which they are destined to pursue. Every student in the third class, should on these public days, have the privilege of being an examiner, and of putting any questions to the candidates, provided they are not foreign from the sciences taught in the first class. But, of this the Head Master will be the most proper judge.

THE STUDIES OF THE SECOND CLASS.

The first division of this class, commence the study of the French language; in the pursuit of which, the same rules should be observed as were prescribed for the attainment of English grammatically. After the tutor has lectured them on the general principles of that language, and pointed out the differences in its syntax and our own, it is evident, that they will have scarcely any thing more to learn than the meaning of words; for they will be so thoroughly versed both in the principles of Universal Grammar, and of those principles reduced into their own tongue, that they will readily attain the different turns of speech, and the peculiarities in the construction of French. *Les Principes Généraux et Raisonnés de la Grammaire Française par M. Restaut*, appears to me to be a clearer and much more scientific performance than the more modern grammar of Wailly. But it is written in the French language, and therefore, as I have already reprobated the stupid fashion of teaching the rudiments of language in an unknown tongue, I should advise, that the tutor translate it entirely, together with the rules on versification annexed to it, and that the boys should copy from his manuscript small portions for their daily lessons. They will become mas-

ters of every lesson by the time they have written it out. When they have reached the verbs, let them read some easy French author, such as *Telemaque* par Fenelon. The tutor should be particularly careful to point out the nature of those articles that are prefixed to French words, which must appear strange and unnecessary to an Englishman. He will obtain sufficient information on this head from the books recommended in page 231, from the articles on grammar by Du Marsais, in the French Encyclopedia, and *les principes de Littérature* par Batteux. When they have become a little more familiarized with the idioms and words of the language, and when they have advanced further in the grammar, it will be highly advantageous and promotive of their proficiency in English as well as French, if they were to translate some of the letters of Sévigné into their own language. They would acquire by this mean, a taste for composition and epistolary correspondence, as well as a knowledge of French; for, to translate well, a person must be perfect master of the matter of his author, which he should make his own, by accommodating its whole spirit and meaning into his own tongue. The best English and French Dictionary is Boyer's, and that is a very bad one: as soon therefore, as

they are able to read French with tolerable facility, I would advise them to discard Boyer, and adopt only the Dictionary of the French Academy, and the excellent treatise of the Abbé Girard entitled *Synonimes François*. This work will instruct them in all the varieties of the language and facilitate its acquisition beyond all others. They should have nothing to do with all those French and English grammars, and French and English Dictionaries, with which a set of swindling renegadoes have glutted this country. It is a fact which I am persuaded M. de Sartine, would corroborate, were he still Lieutenant-General de Police, that the major part of the rascals who have come over into this country from France, before the epoch of the Revolution, and insinuated themselves into our schools as ushers or teachers of the languages, were no other than ignorant valets and hair-dressers, who were obliged to quit their own country from their extravagances or their crimes. The revolution has cast on our shores a very unfortunate race of men, many of whom possess good talents and character; these exiles may be useful in teaching the French language, and it will be an act of charity to employ them. Besides, it is but fair and politic that we should extract all we can from them, since it is not un-

likely, if any change, take place in the government of their country, that many of them will make their peace at the expence of great Britain.

The pupils of this division being daily employed in reading French, they may go through a short but elegant syllabus of ancient and modern history, written by Bossuet, Bishop of Meaux, entitled *Discours sur l'History Universelle*, which reaches the year 800 after the birth of Christ; a wretched supplement to it has been published which brings the history down to the year 1700. When they are not engaged in their daily French lessons, let them go through a course of plain trigonometry and astronomy; in which they should read Simpson's Trigonometry annexed to his edition of Euclid's Elements, and Furguson's Dialogues on Astronomy. As a conclusion to the whole let them read with attention Bonnycastle's Introduction to Astronomy, in a series of Letters, in which the subject is treated in a most elegant and masterly style.

The next science to which they should attend in this division is, Algebra; and the same reasons that justify our application to Geometry as an excellent system of rational logic,

will sanction the present recommendation of Algebra. It is the principal object of this science, by exhibiting the several relations of things in a kind of symbolical language, so to represent them to the imagination, as that we may carry our attention from one to another, in any order we please. Hence, however numerous those relations are, yet by taking only such a number of them into consideration at once, as is suited to the reach and capacity of the understanding, we avoid perplexity and confusion in our researches, and never put our faculties too much upon the stretch, so as to lose ourselves amidst the multiplicity of our own thoughts. As in Arithmetic, we rise to a just conception of the greatest numbers, by considering them as made up of various progressive combinations; so in Algebra, those manifold relations which often intervene, between known and unknown quantities, are clearly represented to the mind by throwing them into a series of distinct equations. And as the most difficult questions relating to numbers are managed with ease, because we can take the parts of figures separately, and proceed with them one after another; so also the most intricate problems of algebra are in like manner readily unfolded, by examining the several equations a-

part, and unravelling them according to certain established rules of operation. And here we should notice, that in very complicated problems which produce a great number of different equations, it generally happens that every one of them includes a variety of unknown quantities. When therefore we are about to solve them separately, as it would distract and entangle the mind too much, to engage in the pursuit of so many different objects at once; our first business is, by artfully coupling the several equations together, or by the various ways of multiplication, subtraction, addition, and substitution, to derive others from them more simple, until at length by such a gradual process, we arrive at some new equation, with only one unknown quantity. This being done, we set ourselves to consider the equation last found, and having now to do with an object suited to the strength and capacity of the mind, we easily discover, by the established rules of the art, the quantity sought. In this manner we proceed with all the several unknown quantities one after another, and having by a series of distinct operations traced them separately, the question is thereby completely resolved. Hence it appears, that the business of invention as practised in algebra, depends

entirely upon the art of abridging our thoughts, reducing the number of particulars taken under consideration at once to the fewest possible, and establishing that progressive method of investigation, which has been already fully explained from examples in arithmetic. In geometry, many demonstrations of problems and theorems, are wholly derived from the construction of the figure made use of, and the drawing of lines from one point to another. In like manner in algebra, the devising of proper equations from the conditions of the question proposed, and contriving neat expressions from the unknown quantities, contribute essentially, to the easy solution of problems. And when we have even carried on the investigation to some single equation with only one unknown quantity; as that unknown quantity may be variously perplexed and entangled with others that are known, so as to require a multiplicity of different operations, before it can be disengaged, which often involves us in long and intricate calculations, and brings surds and irrational quantities in our way; algebraists, to prevent in some measure these inconveniences, and as much as possible the process, have fallen upon several methods of substitution, which are of great service in very complicated questions.

The most useful elementary treatise on this subject is Bonnycastle's Introduction to Algebra, which may be followed by the more elaborate productions of Ludlam, and Maclaurin.

The second division of this class must read the French poets, beginning with the Lutrín of Boileau, and passing to the comedies of Molière, the tragedies of Corneille and Racine, and L'Art Poétique de Despréaux; of this last treatise they should be perfect masters, because he is better calculated than any other French author to polish their taste and refine their judgment. After they have made themselves well acquainted with these writers, they may read La Henriade de Voltaire, l'Essai sur la poésie Epique, together with all the dramatical works of that universal genius.

Whoever seriously considers the plan of education which I have recommended and endeavored to support throughout the whole of this volume, will easily perceive that the rational principles of Logic have been already explained in the course of their grammatical pursuits, and in the exposition of the generation of our ideas. Nothing therefore, remains to make them masters of the science, but to develop the *tech-*

nical method which logicians adopt in their description of the fundamental operations of the human understanding. Duncan's Elements of Logic, or Watts's treatise will suffice for this purpose, and I am convinced they will comprehend every part at the first reading.

The last division of this class should confine their studies to these subjects; the reading of the French poets, Ethics, and a more enlarged system of ancient history. It is necessary before they enter into a comprehensive view of the principal actions and enormous vices of their fellow creatures, that they acquire a philosophical exposition of the motives which determine men to certain actions, the sources of merit and blame, and of the pernicious effects on society of immoral habits, and vicious propensities. By obtaining in this manner strict notions of justice, and by inquiring into the immutable principles which direct all social conventions, and which govern all associated beings; they will be prepared to weigh in the scales of wisdom that catalogue of black horrors which history presents to the mind, as arising from the ambition and avarice of mankind. They will learn to appreciate the talent of discrimination, to mourn over the scenes of causeless havock, to detest

oppression, and to counteract the dark policy of the oppressor. Paley's Moral and Political Philosophy, Burlamaqui's Principles of natural and politic Law, and Vattel's Law of Nature and Nations, will amply communicate as much knowledge on this most important branch of human inquiry, as can be expected in a course of elementary education.

To complete their course of ancient history, let them study the History of ancient Greece by Mitford, or Gillies, accompanied with maps, and Barthelemi's Voyage of Anacharsis the Younger, Potter's Antiquities of Greece, and the Lives of the great men of Greece by Plutarch. The three last may be considered as books of reference. When they have reached the eventful period of the Man of Macedon, let Leland's life of Philip, and his translation of the Orations of Demosthenes occupy their most profound and stedfast attention. Having thus pursued the thread of Grecian story, amid all the triumphs of war and civil policy, to the fatal hour of its subjugation, under the Roman eagle, they should take up the history of the Rise, Progress, and Termination of the Roman Republic, by Furguson, which should be compared throughout with Hook's History, and Vertot's

Revolutions of Rome. Montesquieu's Considerations on the causes of the grandeur and decline of the Roman Empire, Kennett's Antiquities of Rome, Plutarch's Lives of the illustrious Romans, may be used as books of reference. And this will be a good opportunity to read Dryden's translation of Virgil. Hook's history extends no further than the battle of Actium, but Ferguson pursues his narrative to the period of the Cæsars, when the subject is continued in the animated and luminous pages of Gibbon. Towards the close of the republic, they should read the Orations of Cicero, his life written in an unrivalled manner by Middleton, and Melmouth's translation of his letters. Gibbon's History of the Decline and Fall of the Roman Empire, connecting ancient with modern history, will complete the studies of the second class.

We are now arrived at the point where the education of the Under Academy is shortly to cease; a few lines will therefore comprize what I have to propose on their remaining studies. The mode of applying to them has been already anticipated; and those who are desirous of obtaining a more comprehensive and impartial review of the PHILOSOPHY OF HISTORY, are re-

ferred to the second volume of this work, entitled, *Elements of Political Knowledge*, in which I have endeavored to elucidate the connection between this subject and the important concerns of Commerce, Government, and Jurisprudence. The removal of the pupils into the third class, must be attended with the same solemnities that were occasioned at the time of the former public examination. When the scholars have been removed into the first division, their studies ought to be chiefly occupied in obtaining some knowledge of natural philosophy, in which science they will obtain all the information necessary from Ferguson's Introduction to Sir Isaac Newton's Philosophy, Locke's Elements of Natural Philosophy, Martin's Philosophia Britannica, Nicholson's Introduction to Natural Philosophy, Euler's Letters to a German princess, Walker's Lectures on the same subject, and Algarotti on Light and Colors. The tutor should not fail to accompany their daily pursuits with pertinent remarks and experiments, for which he should be provided with suitable apparatus.

Having by this time finished the study of Gibbon's history, they should pursue the thread of modern history in the following or-

der. Dr. Robertson in his history of the Emperor Charles V. has taken up the subject where Gibbon left it. The introductory volume is valuable, on account of the view which is taken of the progress of society, from the period of the overthrow of the Roman Empire, to the final settlement of the barbarians in the different nations of Europe. As the age of Charles V. was distinguished by events which wrought an astonishing change in the condition of society, the student cannot dwell too long or too attentively upon it. The invention of the art of printing, and of fire arms, the discovery of the Indies, and of the new world, and the reformation of religion, all rise in rapid succession, elevating the mind with the pomp and majesty of the events. Many of the conclusions of Dr. Robertson in his account of the manners, laws, and institutions of the barbarians, better known by the name of the Feudal system, have been proved erroneous, by that learned and industrious antiquary the late Dr Gilbert Stuart, in his *View of Society in Europe, in its Progress from Rudeness to Refinement*; and therefore, his work should always accompany that of Robertson. After which, they should read and compare together, the Abbé Raynal's *History of the East and West Indies*, Robertson's *His-*

tory of America, and the History of the European Settlements, by an anonymous author, though the work is generally ascribed to the pen of Mr. Edmund Burke. As a poetical companion to these authors, they will receive much instruction and delight from Mickle's translation of the *Lusiad* of Camoens. The life of Philip II. the son and successor of Charles V. has been written with great fidelity and elegance by Dr. Watson, and the series of history has been filled up with equal credit by Dr. Thompson in the Life of Philip III.

We have now brought modern history to a period not very remote from our own time. Henceforward the streams of history have swoln enormously, and overflowed their banks, so as to form a multitude of rivulets flowing in different channels. Having thus ranged over every useful department of civil knowledge, let them close their juvenile labors, with unwearied application to that object, which is nearest and dearest to every generous *mind*, I mean the history of our native country: but, as a preparatory step to this study, they should go through Velly's History of France, and M. de Bou-lainvillier's account of its ancient parliaments; at the same time, they may use Henault, and

L' Abregé Chronologique de l'Histoire de France, par Mezeray. It may seem strange that the study of French history is recommended before that of our own country, but on more serious reflection, the reader will perceive that the history of France, is, in a great measure, the history of England; for the French authors are much better informed, and have written from more accurate materials on the Feudal system, and the early polity of the Gothic nations, than can be expected from any English writer. All these nations had a common origin; their customs, laws, and manners, were long the same. But England, from a variety of causes, which shall be explained in a future work, was the first to break loose from the Feudal subordination, and to re-conquer her liberties. While they were gradually losing this most precious gift of God, the good people of England retained the boon, and fed it with their blood. Hence, the Feudal system, ripening to maturity by the want of union among the people of other countries, deeply engrafted itself in the soil, towered up to heaven, and spread its noxious branches over every part of the continent of Europe. Having become a public law, it necessarily excited the attention of all ranks, and every document was preserved that had any re-

lation to it. While in England, the system was going silently to decay; by the furious civil wars that were waged for nearly a century, and by the subsequent dissolution of the monasteries, a multitude of deeds, charters, and chronicles were lost, which might have illuminated the page of the historian, or enriched the knowledge of the antiquary. We are indebted chiefly to the labors of a few learned lawyers and antiquaries, for having rescued from oblivion, the mouldering fragments of our early jurisprudence. The history, the constitution, the laws of England, are feudal in their nature, without partaking of the odious qualities of feudality. These considerations therefore, warrant our giving priority to the history of France. The following books may afterwards be read together; Stuart's Historical Disquisition concerning the English Constitution, Squire on the Anglo-Saxon Government, Millar's Historical View of the English Government, and Sullivan's Lectures on the Feudal Law. After they have made themselves acquainted with these works, they should read with indefatigable attention Hume's History of England, as far as the reign of Henry VII. accompanied by Dr. Henry's History, which extends no further than that period. When they are about to be-

in the reign of the Tudors, they should take up Anderson's History of Commerce, which, with Blackstone's Commentaries, should be used as references until they have completed their course; and in the reign of Charles II. they should read, together with Hume, Rapin's account of that dissolute reign, and the historical plays of Shakspeare, from which they will derive considerable information, respecting many of the usages, and opinions of our forefathers.

Lastly, to crown their elementary studies, they should undergo a rigid examination from that excellent epitome of Universal history, entitled, *Essai sur l'histoire universelle* par M. de Voltaire, with the supplements he has added of the *Siècle de Louis XIV and XV*. These writings will revive the recollection of all their past labors, and effectually put their knowledge to the trial. So many questions result from them on all the important subjects of legislation, manners, religion, arts, and sciences, that to understand the work perfectly, is to prove the accuracy and extent of their information. It is written in order to provoke reflection. In every volume, sacerdotal tyranny is exposed with a bold and masterly hand; the veil is drawn a-

side which concealed from infatuated millions the fraud and ambition of kings and priests, and despotism of every kind is depicted in its true colors, and held up to the execration of all mankind. A mighty moral lesson is inculcated, that ignorance is the parent of vice and superstition, peace and justice the offsprings of knowledge ; and hence, the wounds of humanity are not to be eradicated by exterminating remedies and caustic applications, but by an enlightened system of NATIONAL EDUCATION, which reproaching the perpetrators of wrong with the peaceful weapons of reason, and filling every citizen with a just sense of the dignity of his nature, must form an indissoluble and eternal alliance between knowledge and virtue, freedom and public prosperity.

After what has been said above, it may almost appear to be a paradox in politics (if we were not daily accustomed to greater absurdities) that those innocent institutions called Sunday schools, have been discountenanced, because they have a tendency to make the people think, and expose them to the risque of reading incendiary publications. People who reason after this mode, may be divided into two classes. The first, would confine all knowledge within the

factitious arrangements of fortune, and consequently, would make fortune only the test of moral obligation, and of ability. The second, actuated by milder sentiments, although by timorous motives, are apprehensive of evils arising from the abuse of the principle. Their opinions therefore, are to be respected, while the former merit our contempt and abhorrence. Wise and virtuous magistrates would rather govern thinking men, than mechanical brutes; but knaves prefer legislating for fools. Their sentiments are worthy of a Turkish Cadi, and of the meridian of Constantinople, but destructive of the happiness of a free community. If knowledge be a pernicious acquisition, it is evidently a more dangerous instrument in the hands of those who possess the gifts of fortune and thereby power, than in the hands of the commonalty, who are deprived of those accursed resources by which the fountains of honor, justice, and freedom, have been too often corrupted and poisoned. If on the contrary, its effects be beneficial, who will presume to limit its circulation? The law of England declares that *Ignorantia legis non excuset*; this is the principle of all free government. In what manner therefore we can reconcile the commission of a crime and its punishment with utter ignorance, I leave to the

explication of those political sophists, who delight to make a mystery of government, and to confound the plainest principles of common sense and Justice.

The governors of nations are not the less secure, because their subjects have sense and discernment. The ignorant alone are liable to be inflamed by the artifices of seditious demagogues. Of this melancholy truth, history affords numberless proofs; and the same evidences present us likewise with another remarkable testimony of the truth of this proposition. It announces, that there have been demagogues in a government, as well as demagogues among a people, both of whom are equally hostile to every species of social instruction. The governmental demagogue, whether under the title of Emperor, King, Priest, or Consul, has nothing to promote his views but the ignorance of the people: with the popular demagogue it is the same. Both of them are ambitious of the attainment of unjust power; but unjust power can never be attained over an enlightened community.

A prejudice of a very unnatural kind has been circulated during later times in this coun-

try, that there is one sort of knowledge fit for the rich, and another for the tradesman and mechanic. This doctrine, supporting itself by vilifying the human race with systematic scurrility as a beggary of no value or estimation, widens the chasm in society, instead of hastening to fill it up and smooth it over. It supports itself likewise, by raising a cloud around that portion of human knowledge called legislation, with the magic of sophistry and rhetoric. Hence, the odious and insulting outrage on humanity, with which many a self-important coxcomb has anathematized the public. *Si populus vult decipi, decipiatur*, has been the approved motto of villains from the earliest hour of oppression to the present day—a motto in which, while they fully admit the principle I have laid down, proves at the same time, that they insolently excuse the long catalogue of their crimes by ascribing them to the ignorance of nations, whom they have unceasingly deceived, plundered, and abused. Blessed are the men whose profession is not to practice upon the credulity of their fellow creatures; blessed are they, who conscious that from an erroneous education ignorance and vice are fostered, struggle in despite of calumny and persecution, to enlighten the mass of mankind!

It will never be denied that a disposition to obtain knowledge is common to all, and that talents display themselves to a very high degree among the unlettered parts of the community. Valor and address are alike common to the highwayman and the conqueror. The only difference between them, is, that the conqueror is an illustrious robber, and receives oblations of incense and crowns of laurel; the other, is an obscure thief, and receives an halter as a reward for his villainies. Indeed, poverty is no more evidence of incapacity, than wealth is, of capacity for knowledge; for many a Cicero has kept sheep, many a Cæsar followed the plough, and many a Virgil foddered cattle. Let the grave instruct the disdainful vain, a lesson of modesty and humiliation!

Perhaps in this neglected spot is laid
Some heart once pregnant with celestial fire;
Hands that the rod of empire might have sway'd,
Or wak'd to extacy the living lyre.

But knowledge to their eyes her ample page,
Rich with the spoils of time, did ne'er unroll:
Chill penury repress'd their noble rage,
And froze the genial current of the soul.

Full many a gem of purest ray serene,
 The dark unfathom'd caves of ocean bear;
 Full many a flower is born to blush unseen,
 And waste its sweetness in the desert air.

Some village-Hampden, that with dauntless breast
 The little tyrant of the fields withstood;
 Some mute inglorious Milton here may rest;
 Some Cromwell, guiltless of his country's blood.

Th' applause of list'ning senates to command,
 The threats of pain and ruin to despise,
 To scatter plenty o'er a smiling land,
 And read their hist'ry in a nation's eyes.

Their lot forbade; nor circumscribed alone
 Their growing virtues, but their crimes confined
 Forbade to wade through slaughter to a throne,
 And shut the gates of mercy on mankind.

The indifference of Charles V. to literature, transmitted to his descendants, seems to be one of the principal causes which has retarded the progress of genius in his dominions. Prussia, on the other hand, will be for ever indebted to Frederick for that progress she has made in science and in arts. Mr. Hume, when writing of the pensions conferred on learned men throughout Europe by Louis XIV. the academies which

were directed by rules, and supported by salaries, observes, "We may be surprised that this example should not be more followed by princes; since it is certain that the bounty so extensive, so beneficial, and so much celebrated, cost not this monarch so great a sum as is often conferred on one useless overgrown favorite or courtier." The same author, in the life of James I. remarks, that from that monarch's great desire to promote controversial divinity, he erected a college at Chelsea for the entertainment of twenty persons, who should be entirely employed in refuting the papists and puritans. All the efforts of the great Bacon could not procure an establishment for the cultivation of natural philosophy: even to this day, no society has been instituted for the polishing and fixing of our language. Indeed, he might have added, that more money is spent among ballet dancers and opera singers, than would suffice to defray the expence of educating the whole nation. So long ago as the time of Bayle, the same objection was raised against popular instruction, from the *possibility* of its abuse. This argument of possibility may be as well extended to every other occurrence of life, nay even against legitimate government, from the possibility of its abusing the power with which it is entrusted.

"I know some men of parts, says Bayle, who are surprised that in kingdoms, the instructors of youth are allowed to read to their pupils the books of the ancient Greeks and Romans, which are replete with examples of the love of liberty, and which contain so many anti-monarchical principles." But, this is not more surprising than to see Republican states authorize their Law professors to explain the Code, and Digest, in which there are so many principles that suppose the supreme and inviolable authority of the Emperor. In fact, if poison be disseminated, the antidote is at hand. The same books which reflect on monarchies, reflect also on republics. If on the one hand, we find the great maxims of liberty, and the noble efforts of courage with which it has been maintained or recovered; on the other, we have exposed factions, seditions, and tumultuous humors, which disturbed and ultimately subverted that cluster of little states which distinguished themselves as zealous enemies of tyranny in ancient Greece. Mr. Hobbes conceived such a study favorable to the cause of monarchy, and with this view, published his translation of Thucydides. In short, every thing is on the side of establishments founded on truth, justice, and freedom; every thing but activity is wanting to innovators.

whose systems are founded on falshood and anarchy.

Genius is often confounded with mere capacity. Nothing however is more evident, than that they are totally distinct. A capacity for learning, is very general among mankind. As birds are by nature made fit for flying, a horse for the course, or a wild beast for fierceness, so docility is congenial to man. A human creature in every respect unteachable, were one of the greatest and rarest of monsters. Most children promise some abilities, though the want of culture and other causes often blast them. Mere capacity, in most subjects, implies nothing beyond a little judgment, a tolerable memory, and considerable industry. But true genius is very different, and much less frequent. All therefore, that we plead for is, to enable ordinary talents which comprize the mass of the community, to be furnished with the means of intellectual improvement, and not to be excluded by those fallacious principles, which have hitherto retarded the progress of order and civilization.

Amidst all the shocks and revolutions of empire and opinion, a good system of Public In-

struction would serve as a common assurance of *this* realm. And if it occupied the attention of governments as much as the incitements to avarice, and the ambition of false glory, we might (to use a metaphor) admire the future prospect of Astræa descending from heaven, and reviving the reign of Innocence and Concord among men. Hitherto the earth can only be examined as a vast theatre of depopulation and waste; it is surely time to contemplate the dawnings of reason, happiness, and humanity rising from among the ruins of a world which still reeks with the blood of its people, civilized as well as savage.

If to some readers these expectations seem to border on enthusiasm, I will not attempt to justify myself against the charge. I am sensible that good men may entertain too sanguine views of the moral improvement of the world, and that their speculations may lead them to magnify the effects of education. Let it be so. The simplicity of their plans corresponds with the innocence of their motives; and if it be enthusiasm, I am certain, that it is an enthusiasm of an honest tendency, in which nothing is intended unfavorable to the welfare of mankind. Its route is not marked by

scenes of violence and human slaughter, but it leaves the benefits it proposes to confer, to the slow but progressive operations of human reason. And in the full confidence that conformably to the order of nature, man was destined to improve and to be happy, I look forward with no small degree of exultation to the arrival of that epoch, when the claims of humanity shall be inviolably respected, and when PUBLIC INSTRUCTION superseding the logic of bayonets, shall be universally considered as the most effectual method to render a nation powerful and a people happy.

END OF VOL. I.

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 LOCKETT, PRINTER, DORCHESTER, 1800.  
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Appendix.

IT was observed in page 302 of the work, that "such an astonishing genius for the mathematics as Paschal, is rarely to be found." To gratify the curiosity, and to inspirit the ardor of my reader, I have subjoined the following account of the juvenile progress of that great man, written by his own Sister, Madame Perier.

My Father's principal maxim in the child's education was to gain him a superiority over what he was employed about, and for this reason he would not begin teaching him Latin, till he was twelve years of age, that so he might acquire it with the greater facility.

During this interval he never suffered him to be idle, but conversed with him upon all subjects that were not above his capacity. He gave him a general view of the nature and meaning of languages; he shewed him how they were reduced to certain grammatical rules, that these rules had their exceptions too, which were carefully taken notice of, and that thus a method had been found out of establishing a communication between one country and another, let their languages be what they would.

This general idea enlightened his understanding, and made him comprehend the reason of the rules of grammar; so that when he came to learn them he knew to what intention he learned them, and applied himself precisely to those things which required the most application.

After these my father instructed him in other parts of

knowledge; he often talked to him about the extraordinary effects of nature, as that of gunpowder, and of other things which surprise us, when we take them into consideration.—My brother took great pleasure in this sort of conversation, but he wanted to know the reason for every thing; but as a distinct reason for every thing is yet unknown, when my father did not give it him, or else gave him that which is commonly given, and which properly speaking is no more than a put off, he was dissatisfied with it, for he always had a brightness of understanding to discern admirably well whatever was false from what was true: and it may be said of him that at all times and in all things truth was the only object he aimed at, since to find her out was the sole satisfaction that he had: wherefore from his tender infancy he could never be persuaded by any thing that did not appear to him to be evidently true: and therefore when he thought the reasons given him were insufficient, he searched out for others from himself; and when he had a particular attachment to any thing he never quitted it till he found out some satisfactory reason for it. One time particularly when somebody at table struck a knife against an earthen plate, he took notice that it returned a considerable sound, but by immediately putting a hand upon it, the sound ceased. He wanted presently to know the reason for it, and this experiment influenced him to make many others upon sounds. He made so many observations upon this subject, that at twelve years of age he compiled a treatise upon it which was allowed to be a production of perfect sound reasoning. His genius for geometry began to discover itself when he was but twelve years old, by an accident so extraordinary that I think it very well deserves to be related with all its particular circumstances.

My father was well skilled in mathematics, and by that means was well acquainted with all the ingenious men in

that science, who came often to his house: but as he designed to makemy brother acquainted with the languages, and as he knew the mathematics is a science which satisfies and takes entire possession of the mind, he was not inclinable that my brother should have the least tincture of it, for fear it should make him neglect the Latin tongue and the other languages, which he designed to make him a perfect master of. For this reason he shut up all his books that treated on that subject, and when in company with his friends refrained from all discourse upon that head when his son was present; but all this precaution could not prevent a curiosity so strongly excited in this child, that he would frequently and earnestly solicit my father to teach him the mathematics. But he refused him, with a promise at the same time, that he reserved that science for him as a future reward. He assured him that as soon as he was perfectly acquainted with Latin and Greek he would teach it him.

• My brother, observing this repulse, asked him one day what that science was, and what it treated of? My father told him in general that it was the method of making figures with exactness, and of finding out what proportions they relatively had to one another, and at the same time forbid him talking any more about it, or ever thinking of it. But his genius could not submit to be confined within these bounds; but as soon as he had attained to this single bare discovery, that the mathematics taught the means of making figures infallibly exact, he employed his thoughts about it at his hours of recreation, and being alone in a room where he used to divert himself, he took a piece of charcoal and drew figures upon the tiles of the pavement, trying for example, the methods of making a circle perfectly round, a triangle whose sides and angles might be equal, and other things of that sort. He found all this out by himself only, and afterwards tried to discover the proportions of figures in respect to one another:

but as my father's care had been so strict as to conceal all these things from him, he did not know even the names of them. He was obliged to make some definitions for himself: he called a circle a round, a line a bar, and so on. After these definitions he formed axioms, and in short came to make perfect demonstrations; and as this application leads on from one thing to another, he extended his enquiries so far that he arrived at the 32d proposition of the first book of Euclid. As he was thus employed, my father came into the room without my brother's perceiving it, who was so very intent upon what he was about, that it was a considerable time before he discovered him. It is difficult to say which of them was the most surprised, the son to see his father, who had strictly forbid him any application to this study, or, the father to see his son surrounded by all these figures: but the father's surprise grew infinitely greater, when asking him what he was about, he answered, he was endeavoring to find out such a thing, which happened to be the 32d proposition of the first book of Euclid: my father asked him how he came to think any thing about that. He answered because he had found out such and such a thing before: and upon my father's asking him the same question he did before, he told him some of the demonstrations he had made, and in short by going still backwards over what he had done, and always explaining himself by the names of a round and a bar, he came at last to his definitions and his axioms.

At sixteen years of age he wrote a treatise upon conics, which passed for such a surprising effort of genius, that it was said nothing equal to it in strength had been produced since the time of Archimedes.

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